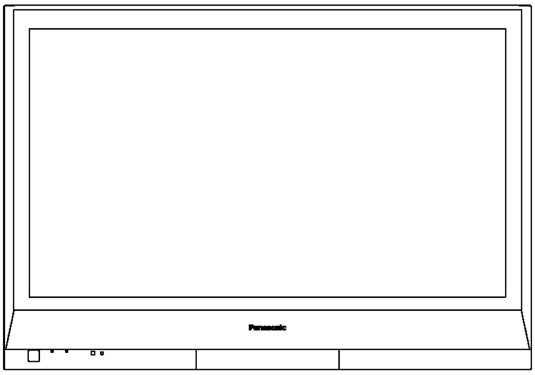
ORDER NO.ITD0604008CE

Service Manual

Plasma Television

TH-50PV60A

GP9DE Chassis



SPECIFICATIONS

ower Source	**AC 220-240 V, 50/60 Hz**
ower Consumption	
Average use	**448 W**
Standby condition	**0.3 W**
asma Display panel	
Drive method	**AC type**
Aspect Ratio	**16:9**
Contrast Ratio	**Max 10000:1**
Visible screen size	**127 cmV**
(No. of pixels)	**1,106 mm (W) × 622 mm (H) × 1,269 mm (diagonal)**
	1,049,088 (1,366 (W) × 768 (H)) [4,098 × 768 dots]
ound	
Speaker	**12 cm × 6 cm × 2 pcs, 8 Ω**
Audio Output	**20 W [10 W + 10 W] (10 % THD)**
Headphones	**M3 (3.5 mm) Jack × 1**
C signals	**VGA, SVGA, XGA**
	SXGA.....(compressed)
	Horizontal scanning frequency 31-69 kHz
	Vertical scanning frequency 59-86 Hz

eceiving Systems/ / Band ame

1. PAL B/G	Reception of Off air broadcasts
2. NTSC 4.43 3. NTSC 3.58 4. PAL 60Hz	Playback from Video Tape Recorders Playback from Special Video Tape Recorders and Special Video Disc Players (Via the AV Sockets) only.

eceiving Channels			VHF 0 to 12	PAL B
			UHF 21 to 69	PAL G
			S'1 to S'3	HYPER TUNER
			S1 to S41	(One tuner)
erial - Rear			VHF / UHF	
perating Conditions				
	Temperature		0 °C - 40 °C	
	Humidity		20% - 80 % RH (non-condensing)	
onnection Terminals				
	AV1 Input	AUDIO L-R	RCA PIN Type × 2	0.5 V[rms]
		VIDEO	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)
		S VIDEO	Mini DIN 4-pin	Y: 1.0 V[p-p] (75 Ω) C: 0.286 V[p-p] (75 Ω)
	AV2 Input	AUDIO L-R	RCA PIN Type × 2	0.5 V[rms]
		VIDEO	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)
		COMPONENT	Y	1.0 V[p-p] (including synchronization)
			PB/CB, PR/CR	± 0.35 V[p-p]
	AV3 Input	AUDIO L-R	RCA PIN Type × 2	0.5 V[rms]
		VIDEO	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)
		COMPONENT	Y	1.0 V[p-p] (including synchronization)
			PB/CB, PR/CR	± 0.35 V[p-p]
	AV4 Input	AUDIO L-R	RCA PIN Type × 2	0.5 V[rms]
		VIDEO	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)
		S VIDEO	Mini DIN 4-pin	Y: 1.0 V[p-p] (75 Ω) C: 0.286 V[p-p] (75 Ω)
	Others	HDMI1/2 Input	TYPE A Connectors	
		PC Input	HIGH-DENSITY D-SUB 15 PIN	R, G, B/0.7 V[p-p] (75 Ω) HD, VD/TTL Level 2.0-5.0 V[p-p] (high impedance)
		Audio Input	RCA PIN Type × 2	0.5 V[rms]
	Monitor / Output	AUDIO L-R	RCA PIN Type × 2	0.5 V[rms] (high impedance)
		VIDEO	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)
mensions (W × H × D)			1,210 mm × 818 mm × 95 mm	
eight			40.0 kg Net	

ote:

esign and Specifications are subject change without notice.

eight and Dimensions shown are approximate.

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic®

1. Applicable signals

* Mark: Applicable input signal for Component (Y, PB, PR), and HDMI

	horizontal frequency (kHz)	vertical frequency (Hz)	COMPONENT	HDMI
525 (480) / 60i	15.73	59.94	*	*
525 (480) /60p	31.47	59.94	*	*
750 (720) /60p	45.00	59.94	*	*
1,125 (1,080) /60i	33.75	59.94	*	*
1,125 (1,080) /60p	67.43	59.94		*
1,125 (1,080) /60p	67.50	60.00		*

- Signals other than above may not be displayed properly
- The above signals are reformatted for optimal viewing on your display.

2. Safety Precautions

2.1. General Guidelines

1. **When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.**
2. **After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.**
3. **After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.**

2.2. Touch-Current Check

1. **Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.**
2. **Connect a measuring network for touch currents between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.**
3. **Use Leakage Current Tester (Simpson 228 or equivalent) to measure the potential across the measuring network.**
4. **Check each exposed metallic part, and measure the voltage at each point.**
5. **Reserve the AC plug in the AC outlet and repeat each of the above measure.**
6. **The potential at any point (TOUGH CURRENT) expressed as voltage U_1 and U_2, does not exceed the following values:**

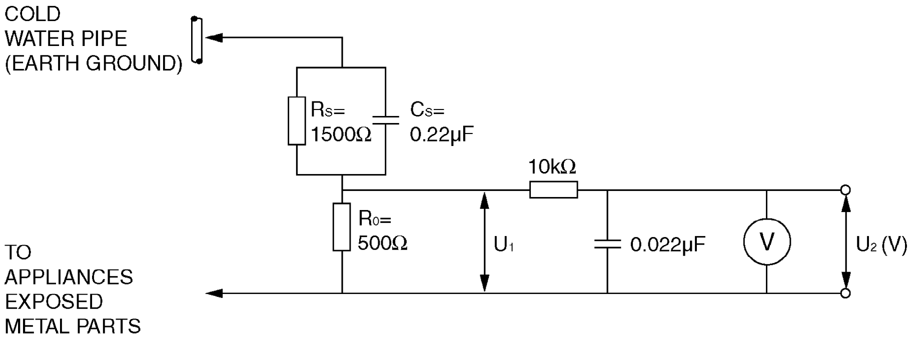
For a. c.: U_1 = 35 V (peak) and U_2 = 0.35 V (peak);
For d. c.: U_1 = 1.0 V,

Note:
The limit value of U_2 = 0.35 V (peak) for a. c. and U_1 = 1.0 V for d. c. correspond to the values 0.7 mA (peak) a. c. and 2.0 mA d. c.
The limit value U_1 = 35 V (peak) for a. c. correspond to the value 70 mA (peak) a. c. for frequencies greater than 100 kHz.

7. **In case a measurement is out of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.**

Figure 1

Measuring network for TOUCH CURRENTS



Resistance values in ohms (Ω)

V: Voltmeter or oscilloscope
(r.m.s. or peak reading)

Input resistance: ≥ 1 MΩ
Input capacitance: ≤ 200 pF
Frequency range: 15 Hz to 1 MHz and d.c. respectively

NOTE - Appropriate measures should be taken to obtain the correct value in case of non-sinusoidal waveforms.

3. Prevention of Electro Static Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electro static discharge (ESD).

1. **Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying**

power to the unit under test.

2. **After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as alminum foil, to prevent electrostatic charge buildup or exposure of the assembly.**
3. **Use only a grounded-tip soldering iron to solder or unsolder ES devices.**
4. **Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static (ESD protected)" can generate electrical charge sufficient to damage ES devices.**
5. **Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.**
6. **Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, alminum foil or comparable conductive material).**
7. **Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.**

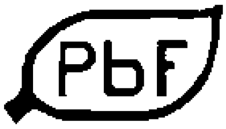
   Caution

   Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. **Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise hamless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).**

IMPORTANT SAFETY NOTICE

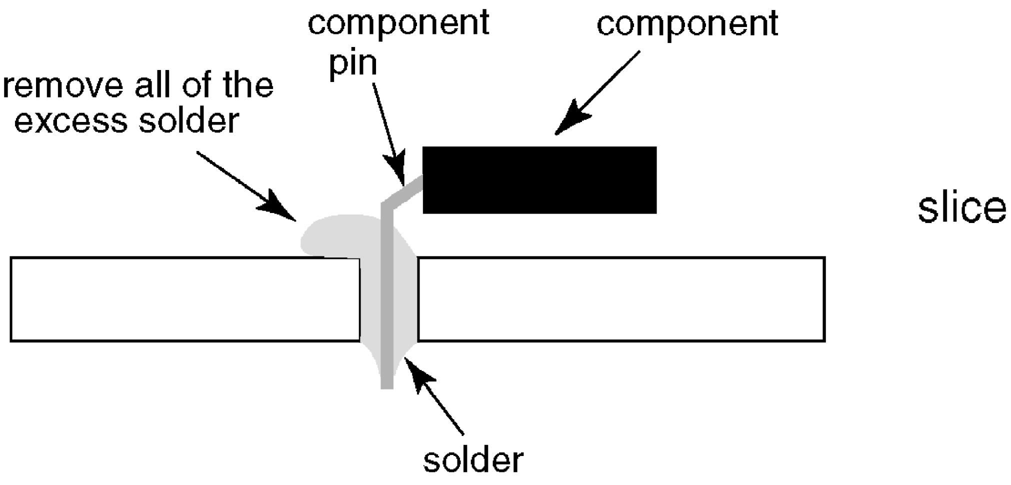
There are special components used in this equipment which are imporant for safety. These parts are marked by ⚠ in the schematic diagrams, Exploded Views and replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

4. About lead free solder (PbF)

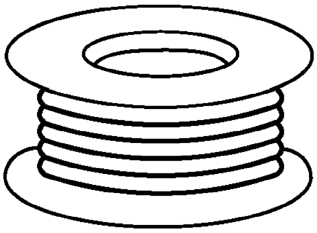
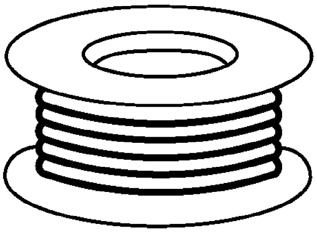
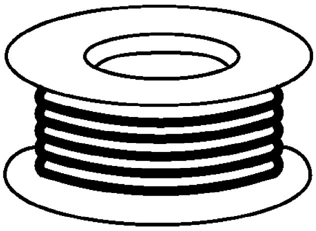
Note: Lead is listed as (Pb) in the periodic table of elements.
In the information below, Pb will refer to Lead solder, and PbF will refer to Lead Free Solder.
The Lead Free Solder used in our manufacturing process and discussed below is (Sn+Ag+Cu).
That is Tin (Sn), Silver (Ag) and Copper (Cu) although other types are available.
This model uses Pb Free solder in it's manufacture due to environmental conservation issues.
For service and repair work, we'd suggest the use of Pb free solder as well, although Pb solder may be used.
PCBs manufactured using lead free solder will have the PbF within a leaf Symbol  **stamped on the back of PCB.**

Caution

- **Pb free solder has a higher melting point than standard solder. Typically the melting point is 50 ~ 70 °F (30~40 °C) higher. Please use a high temperature soldering iron and set it to 700 ± 20 °F (370 ± 10 °C).**
- **Pb free solder will tend to splash when heated too high (about 1100 °F or 600 °C).**
  If you must use Pb solder, please completely remove all of the Pb free solder on the pins or solder area before applying Pb solder. If this is not practical, be sure to heat the Pb free solder until it melts, before applying Pb solder.
- **After applying PbF solder to double layered boards, please check the component side for excess solder which may flow onto the opposite side. (see figure below)**

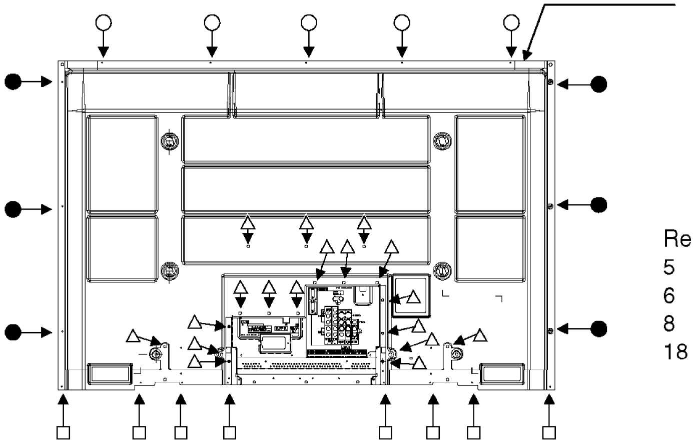


Suggested Pb free solder
There are several kinds of Pb free solder available for purchase. This product uses Sn+Ag+Cu (tin, silver, copper) solder. However, Sn+Cu (tin, copper), Sn+Zn+Bi (tin, zinc, bismuth) solder can also be used.

0.3mm X 100g	0.6mm X 100g	1.0mm X 100g
		

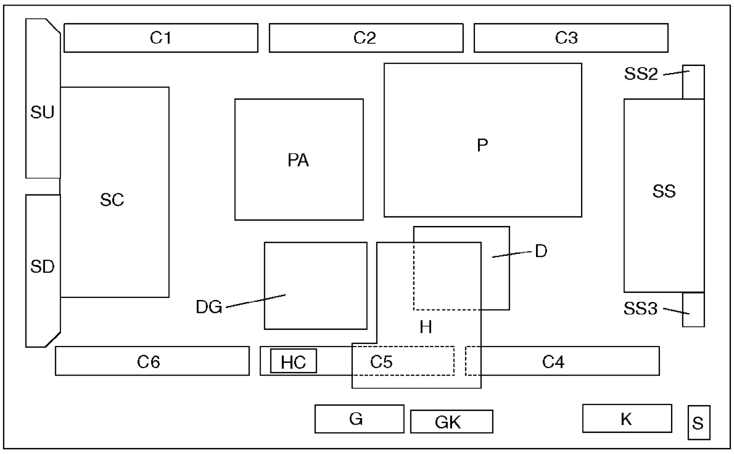
5. Service Hint

Remove the Back Cover



Remove:
5 screws (○) XYN4+F10FJK
6 screws (●) XYN4+F30FJK
8 screws (□) XTB4+12GFJK
18 screws (△) THEL0429

Service Position


C1
C2
C3
SS2
SU
PA
P
SC
SS
D
SD
DG
SS3
H
C6
HC
C5
C4
G
GK
K
S

Board Name	Function	Board Name	Function
P	Power Supply	C1	Data Driver (Upper Right)
PA	DC-DC Converter / Speaker out, Audio AMP, Fan Control	C2	Data Driver (Upper Center)
		C3	Data Driver (Upper Left)
H	AV Terminal, AV Switch	C4	Data Driver (Lower Left)
DG	Digital Signal Processor, Micom, HDMI Interface	C5	Data Driver (Lower Center)
D	Format Converter, Plasma AI, Sub-Field Processor	C6	Data Driver (Lower Right)
K	Remote receiver, Power LED	SC	Scan Drive
S	Power Switch	SU	Scan out (Upper)
G	Front Terminal	SD	Scan out (Lower)
GK	Key Switch	SS	Sustain Drive
HC	Jig Connection	SS2	Sustain Connector (Upper)
		SS3	Sustain Connector (Lower)

6. Plasma panel replacement method

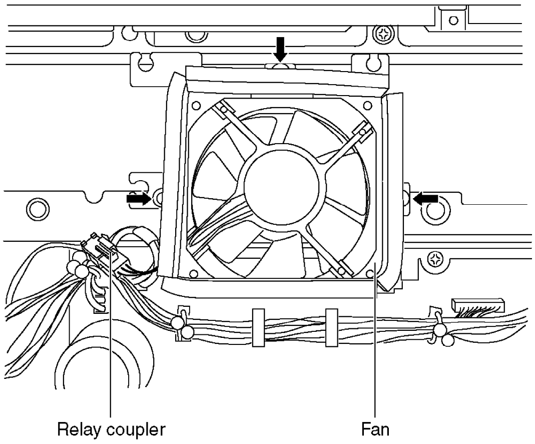
6.1. Remove the Back cover

1. See Service Hint (Section 5)

6.2. Remove the fan

1. Disconnect the relay couplers.

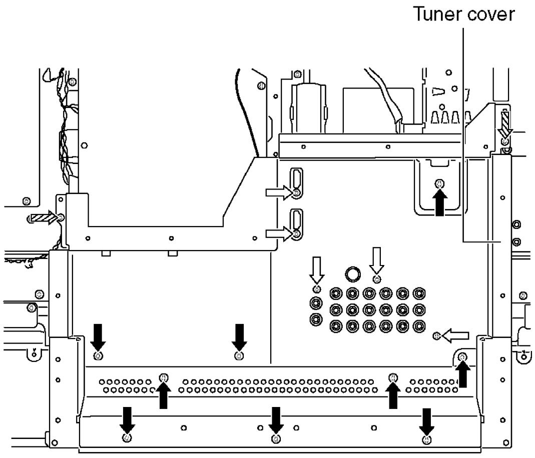
2. Remove the screws (×3➡ each) and remove the fans.



6.3. Remove the rear terminal cover

1. Remove the screws (×8➡, ×5⇨, ×2➨).

2. Remove the rear terminal cover.

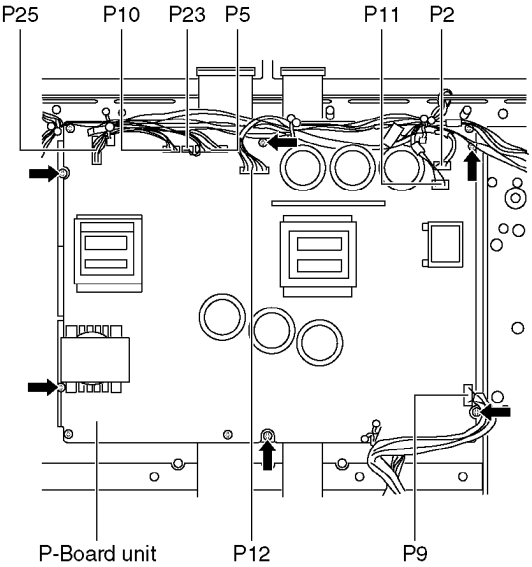

Tuner cover

6.4. Remove the P-Board

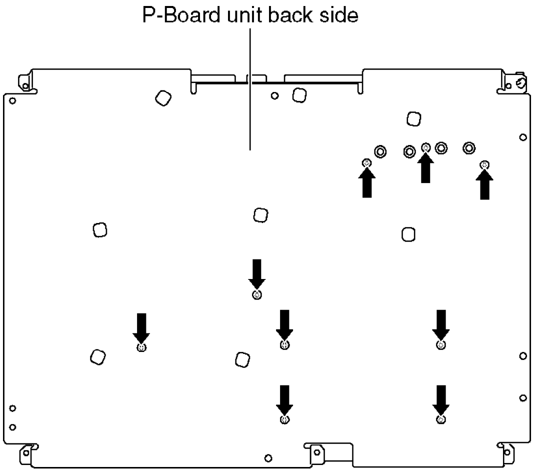
Caution:

To remove P.C.B. wait 1 minute after power was off for discharge from electrolysis capacitors.

1. **Disconnect the couplers (P2, P5, P9, P10, P11, P12, P23 and P25).**
2. **Remove the screws (×6➡) and remove the P-Board unit.**


P25
P10
P23
P5
P11
P2
P-Board unit
P12
P9

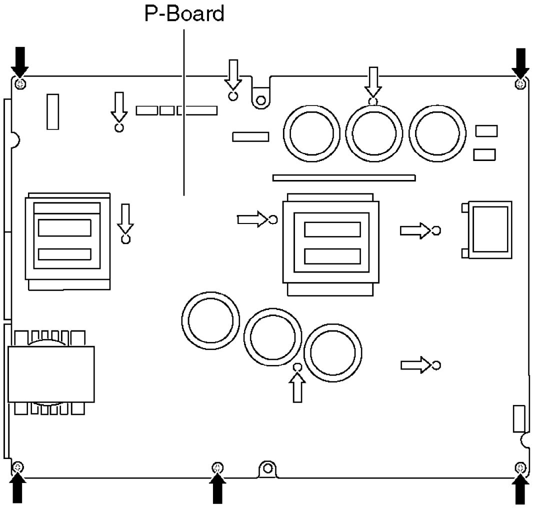
3. **Remove the screws (×9➡) on the back side.**


P-Board unit back side

4. Remove the screws (×5➡).

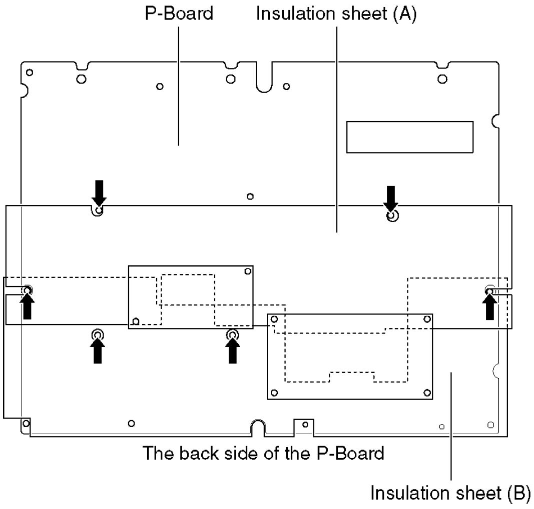
5. Remove the molding props (×8⇨).

6. Remove the P-Board.



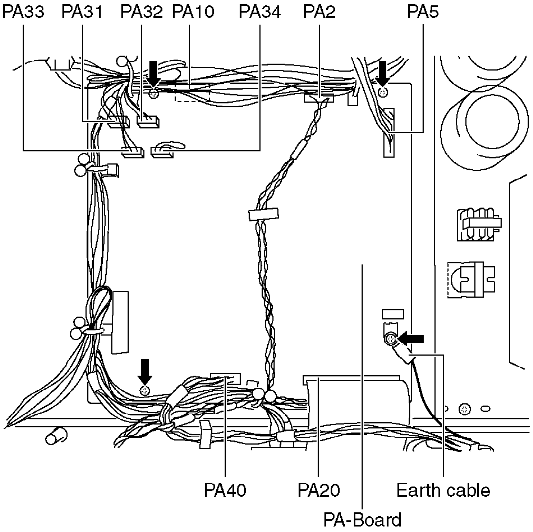
Note:

When assembling the P-Board, the position of each hole of the insulation sheets (A and B) is set to the position of each hole of the P-Board, then assemble them. (➡ marks indicate setting positions.)


P-Board
Insulation sheet (A)
The back side of the P-Board
Insulation sheet (B)

6.5. Remove the PA-Board

1. Unlock the cable clampers to free the cable.
2. Disconnect the couplers (PA2, PA5, PA10, PA31, PA32, PA33, PA34 and PA40).
3. Disconnect the flexible cable (PA20).
4. Remove the screws (×4➡) and remove the earth cable.
5. Remove the PA-Board.

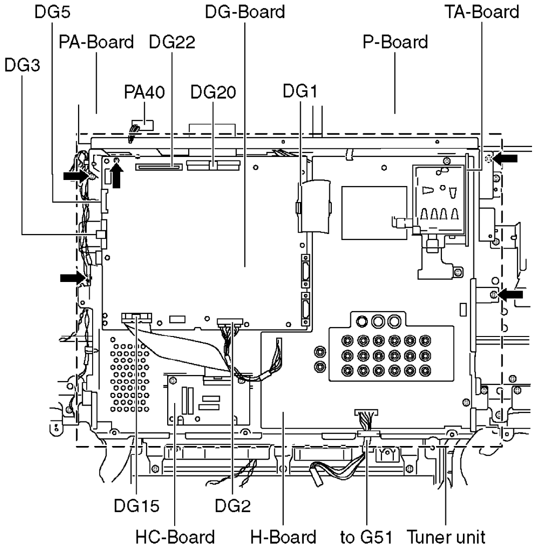

PA33
PA31
PA32
PA10
PA34
PA2
PA5
PA40
PA20
Earth cable
PA-Board

6.6. Remove the tuner unit

1. Unlock the cable clampers to free the cable.
2. Disconnect the couplers (DG5, G51, GS52, PA40 and earth cable).

3. Disconnect the flexible cables (DG3 and PA20).

4. Remove the screws (×4➡) remove the tuner unit.

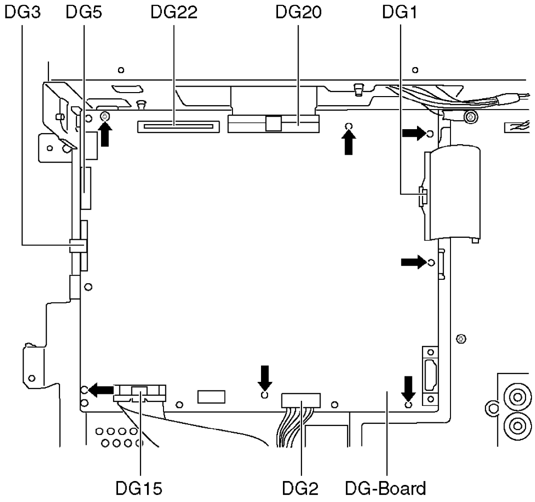

DG5
DG-Board
TA-Board
PA-Board
DG22
P-Board
DG3
PA40
DG20
DG1
DG15
DG2
HC-Board
H-Board
to G51
Tuner unit

6.7. Remove the DG-Board

1. Disconnect the coupler (DG2).

2. Disconnect the flexible cables (DG1, DG15 and DG20).

3. Remove the screw (×7➡) remove the DG-Board.


DG3
DG5
DG22
DG20
DG1
DG15
DG2
DG-Board

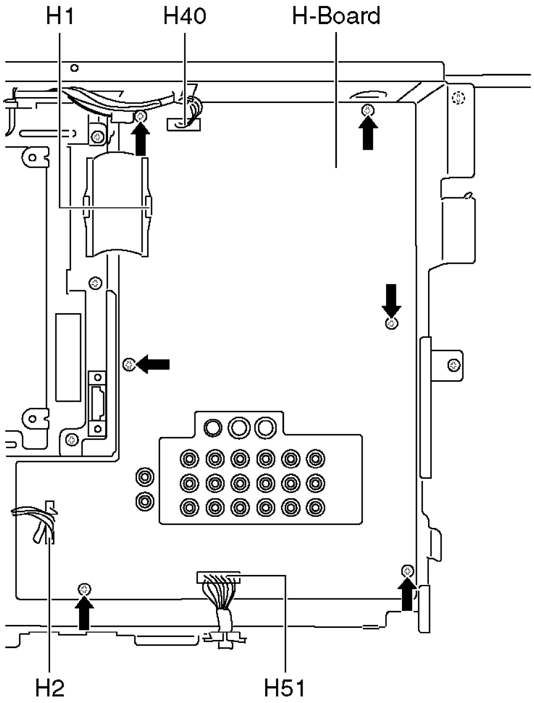
6.8. Remove the H-Board

1. Unlock the cable clampers to free the cable.

2. Disconnect the couplers (H2, H40 and H51).

3. Disconnect the flexible cable (H1).

4. Remove the screws (×6➡) and remove the H-Board.

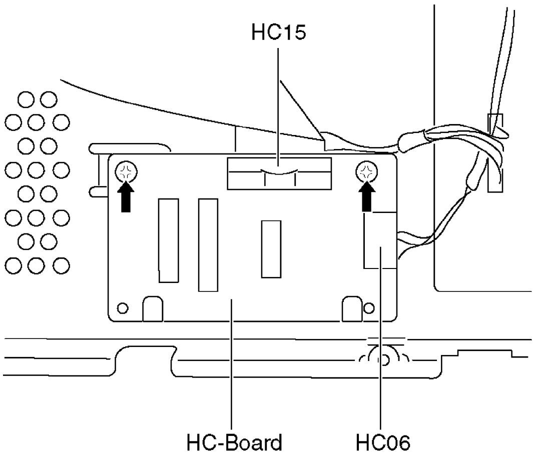

H1
H40
H-Board
H2
H51

6.9. Remove the HC-Board

1. Disconnect the couple (HC06).

2. Disconnect the flexible cable (HC15).

3. Remove the screws (×2➡) and remove the HC-Board.


HC15
HC-Board
HC06

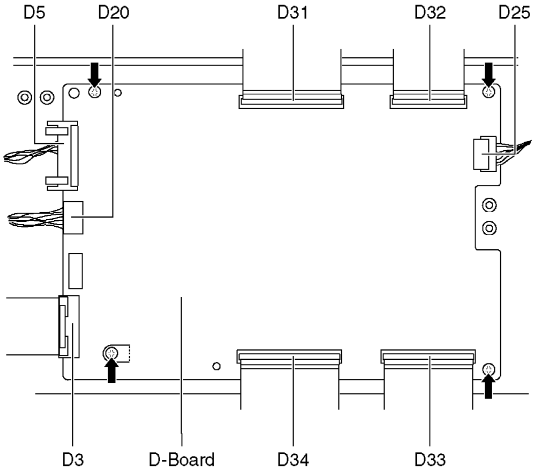
6.10. Remove the D-Board

1. Remove the tuner unit. (See section 6.6.)

2. Disconnect the couplers (D5, D20 and D25).

3. Disconnect the flexible cables (D3, D31, D32, D33 and D34).

4. Remove the screws (×4➡) and remove the D-Board.

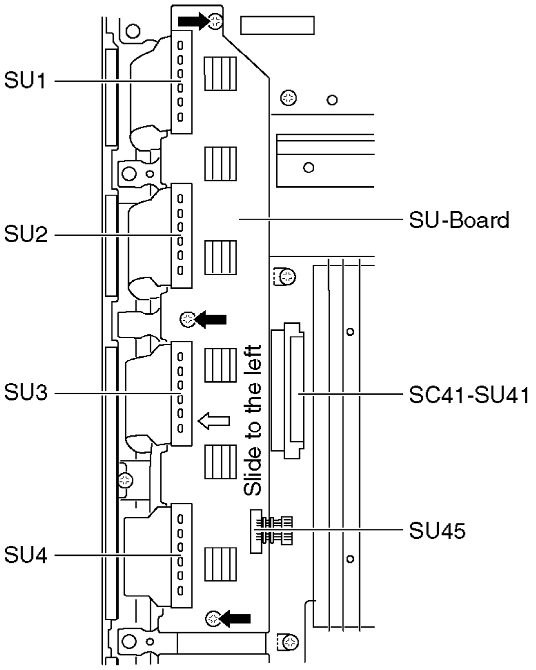

D5
D20
D31
D32
D25
D3
D-Board
D34
D33

6.11. Remove the SU-Board

1. Remove the screws (×3➡).

2. Remove the flexible cables (SU1, SU2, SU3 and SU4) and remove the bridge connector (SU45).

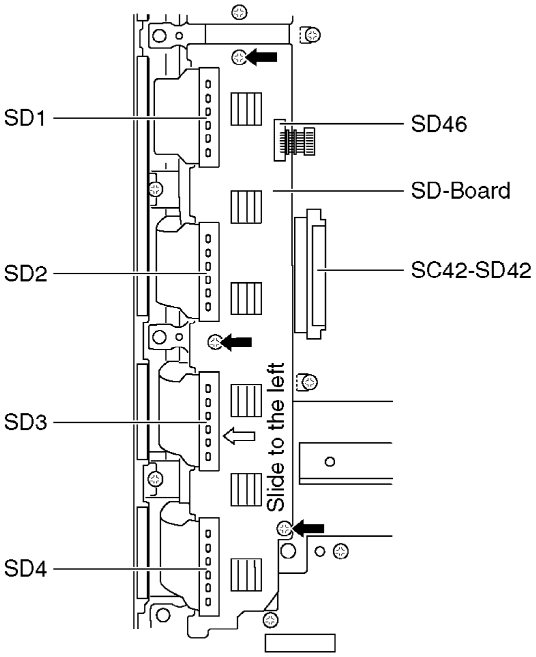
3. Slide the SU-Board to the left to disconnect from a coupler (SC41-SU41) on the SC-Board and remove the SU-Board.


SU1
SU2
SU3
SU4
SU-Board
SC41-SU41
SU45
Slide to the left

6.12. Remove the SD-Board

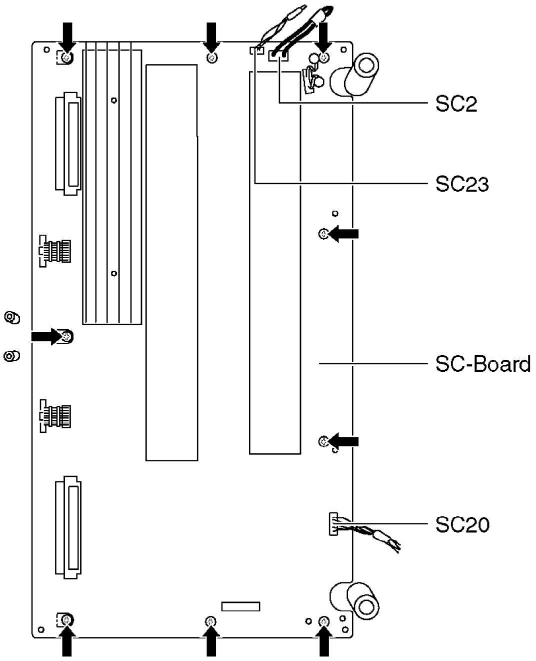
1. Remove the screws (×3➡).

2. **Remove the flexible cables (SD1, SD2, SD3 and SD4) and remove the bridge connector (SD46).**
3. **Slide the SD-Board to the left to disconnect from a coupler (SC42-SD42) on the SC-Board and remove the SD-Board.**


SD1
SD46
SD-Board
SC42-SD42
SD2
SD3
Slide to the left
SD4

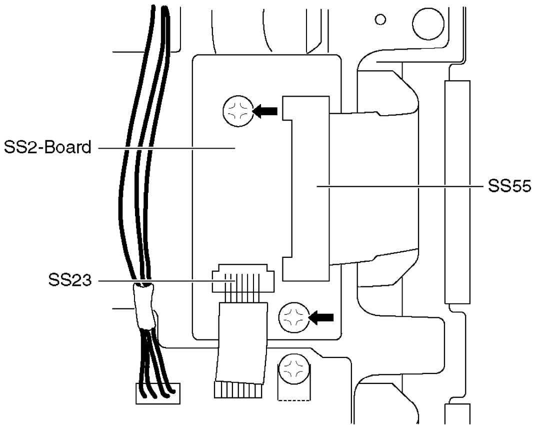
6.13. Remove the SC-Board

1. **Unlock the cable clampers to free the cable.**
2. **Disconnect the couplers (SC2, SC20 and SC23).**
3. **Remove the screws (×9➡) and remove the SC-Board.**


SC2
SC23
SC-Board
SC20

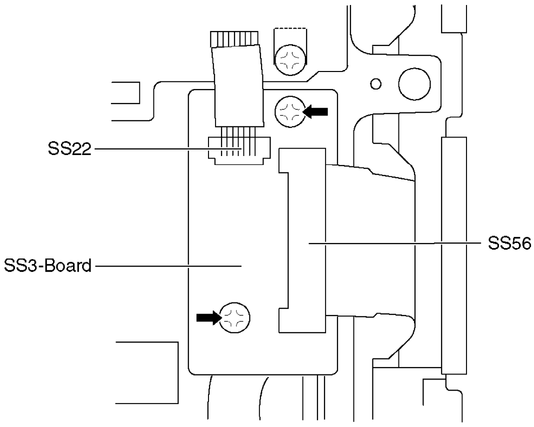
6.14. Remove the SS2-Board

1. Disconnect the coupler (SS23) and disconnect the flexible cable (SS55).
2. Remove the screws (×2➡) and remove the SS2-Board.


SS2-Board
SS55
SS23

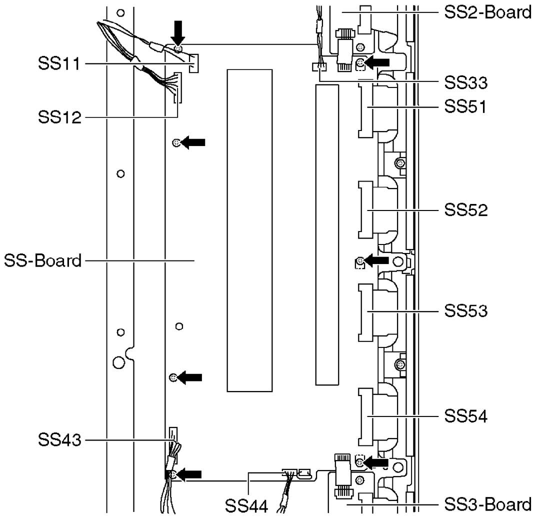
6.15. Remove the SS3-Board

1. Disconnect the coupler (SS22) and disconnect the flexible cable (SS56).
2. Remove the screws (×2➡) and remove the SS3-Board.


SS22
SS3-Board
SS56

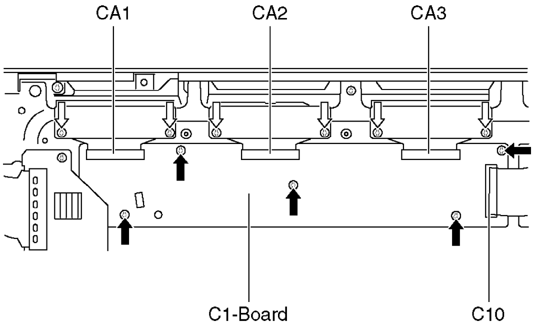
6.16. Remove the SS-Board

1. **Remove the SS2-Board and SS3-Board. (See section 6.15. and 6.16)**
2. **Disconnect the couplers (SS11, SS12, SS33, SS43 and SS44).**
3. **Disconnect the flexible cables (SS51, SS52, SS53 and SS54).**
4. **Remove the screws (×7➡) and remove the SS-Board.**


SS2-Board
SS11
SS33
SS51
SS12
SS52
SS-Board
SS53
SS54
SS43
SS44
SS3-Board

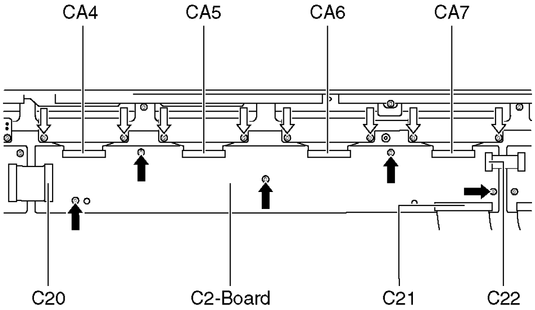
6.17. Remove the C1-Board

1. **Remove the flexible cables holder fastening screws (×6⇨).**
2. **Disconnect the flexible cables (CA1, CA2 and CA3).**
3. **Disconnect the flexible cable (C10).**
4. **Remove the screws (×5➡) and remove the C1-Board.**


CA1
CA2
CA3
C1-Board
C10

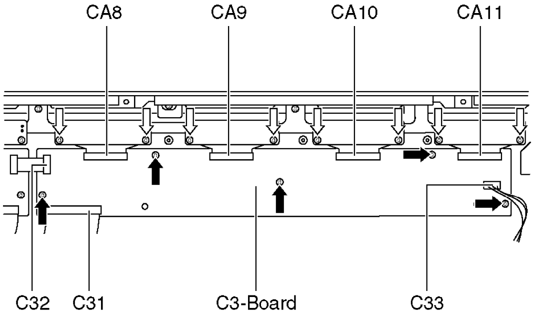
6.18. Remove the C2-Board

1. Remove the flexible cables holder fastening screws (×8⇨).
2. Disconnect the flexible cables (CA4, CA5, CA6 and CA7).
3. Disconnect the flexible cables (C20, C21 and C22).
4. Remove the screws (×5➡) and remove the C2-Board.


CA4
CA5
CA6
CA7
C20
C2-Board
C21
C22

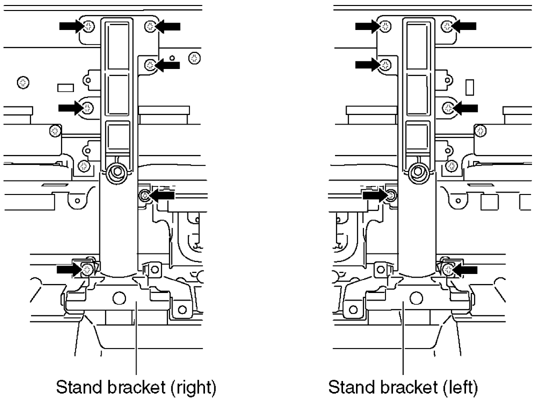
6.19. Remove the C3-Board

1. Remove the flexible cables holder fastening screws (×8⇨).
2. Disconnect the flexible cables (CA8, CA9, CA10 and CA11).
3. Disconnect the flexible cables (C31 and C32).
4. Disconnect the coupler (C33).
5. Remove the screws (×5➡) and remove the C3-Board.


CA8
CA9
CA10
CA11
C32
C31
C3-Board
C33

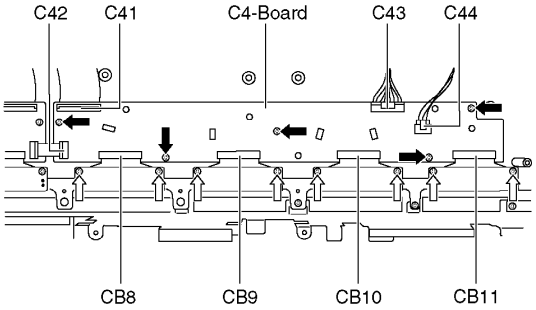
6.20. Remove the stand brackets

1. **Remove the plasma panel section from the servicing stand and lay on a fiat surface such as a table (covered) with the plasma panel surface facing downward.**
2. **Remove the stand brackets (left, right) fastening screws (×6➡ each) and remove the stand brackets (left, right).**



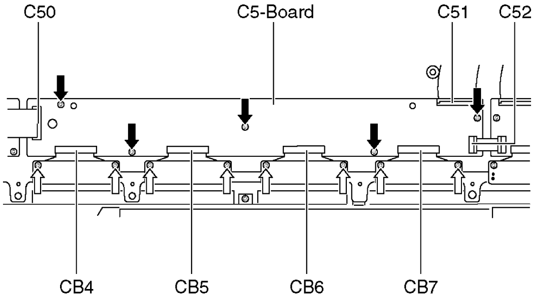
6.21. Remove the C4-Board

1. **Remove the stand bracket (left). (See section 6.20.)**
2. **Remove the flexible cables holder fastening screws (×8⇨).**
3. **Disconnect the flexible cables (CB8, CB9, CB10 and CB11).**
4. **Disconnect the flexible cables (C41 and C42).**
5. **Disconnect the couplers (C43 and C44).**
6. **Remove the screws (×5➡) and remove the C4-Board.**



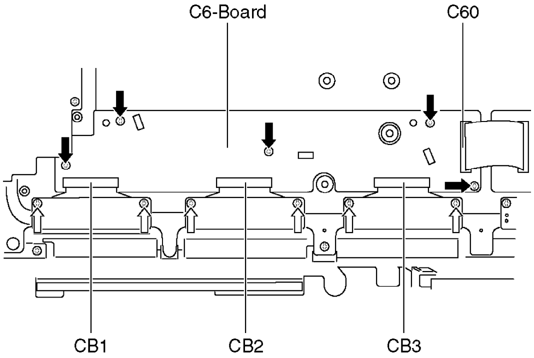
6.22. Remove the C5-Board

1. **Remove the flexible cables holder fastening screws (×8⇨).**
2. **Disconnect the flexible cables (CB4, CB5, CB6 and CB7).**
3. **Disconnect the flexible cables (C50, C51 and C52).**
4. **Remove the screws (×5➡) and remove the C5-Board.**


C50
C5-Board
C51
C52
CB4
CB5
CB6
CB7

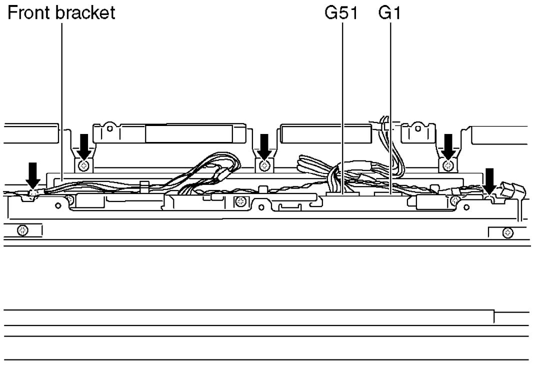
6.23. Remove the C6-Board

1. Remove the stand bracket (right). (See section 6.20.)
2. Remove the flexible cables holder fastening screws (×6⇨).
3. Disconnect the flexible cables (CB1, CB2 and CB3).
4. Disconnect the flexible cable (C60).
5. Remove the screws (×5➡) and remove the C6-Board.


C6-Board
C60
CB1
CB2
CB3

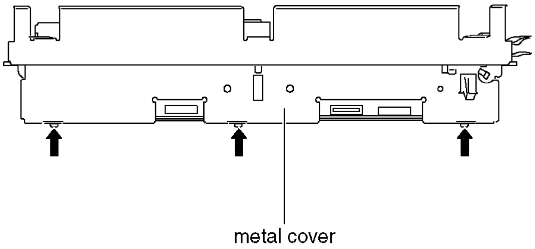
6.24. Remove the front bracket

1. Unlock the cable clampers to free the cable.
2. Disconnect the couplers (G1 and G51).
3. Remove the screws (×5➡) and remove the front bracket.

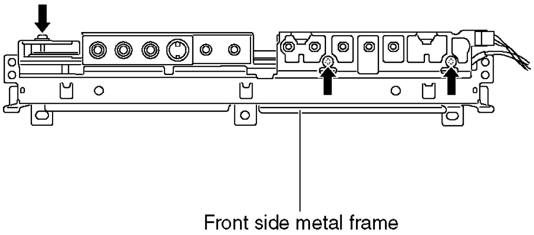

Front bracket
G51
G1

6.25. Remove the G-Board and GS-Board

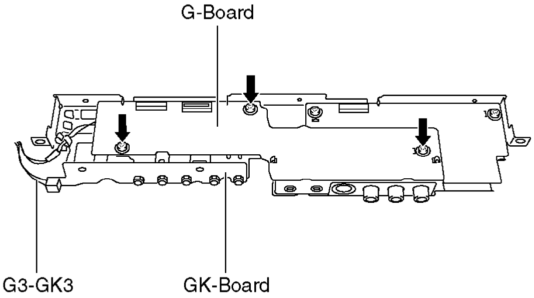
1. **Remove the front bracket. (See section 6.24.)**
2. **Remove the screws (×3➡) and remove the metal cover.**


metal cover

3. **Remove the screws (×3➡) from front side and remove the front side metal frame.**

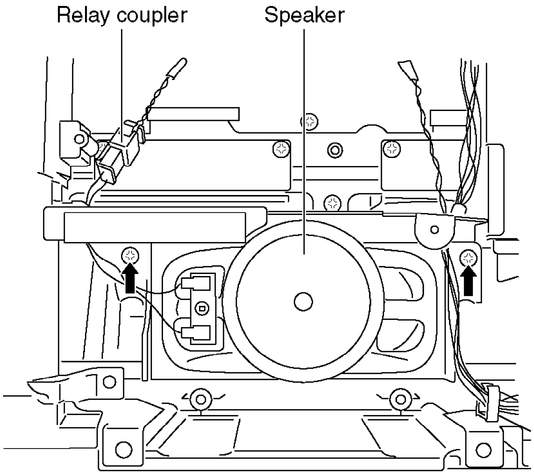

Front side metal frame

4. **Remove the screws (×5➡) and disconnect the couplers (G3-GK3).**
5. **Remove the G-Board and GK-Board.**


G-Board
G3-GK3
GK-Board

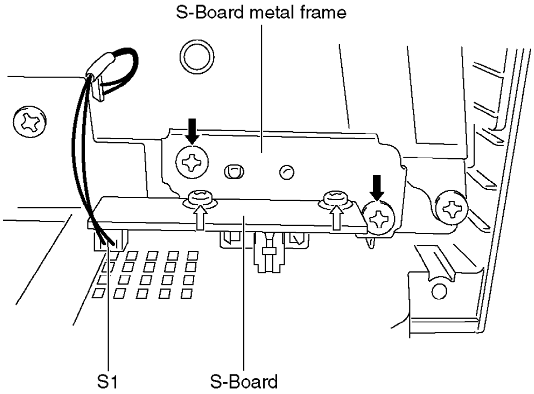
6.26. Remove the speaker L, R

1. **Remove the screws (×2➡ each) and remove the speaker L, R.**


Relay coupler
Speaker

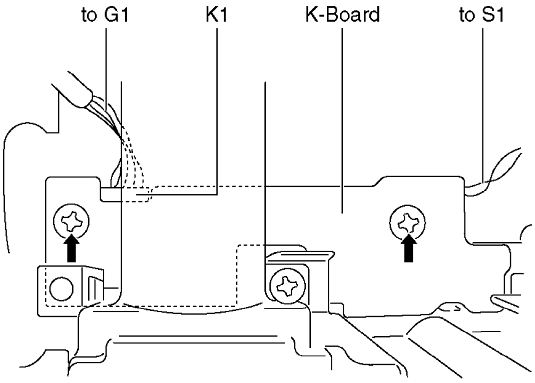
6.27. Remove the S-Board

1. Disconnect the coupler (S1).
2. Remove the screws (×2➡) and remove the S-Board metal frame.
3. Remove the screws (×2⇨) and remove the S-Board.


S-Board metal frame
S1
S-Board

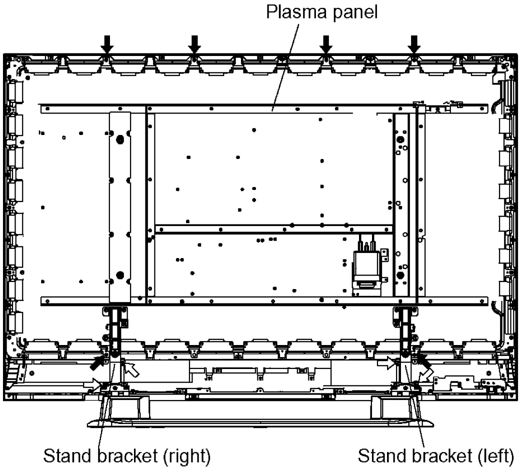
6.28. Remove the K-Board

1. Unlock the cable clampers to free the cable.
2. Disconnect the couplers (G1 and S1). (See section 6.24. and 6.27.)
3. Remove the screws (×2➡) and remove the K-Board.

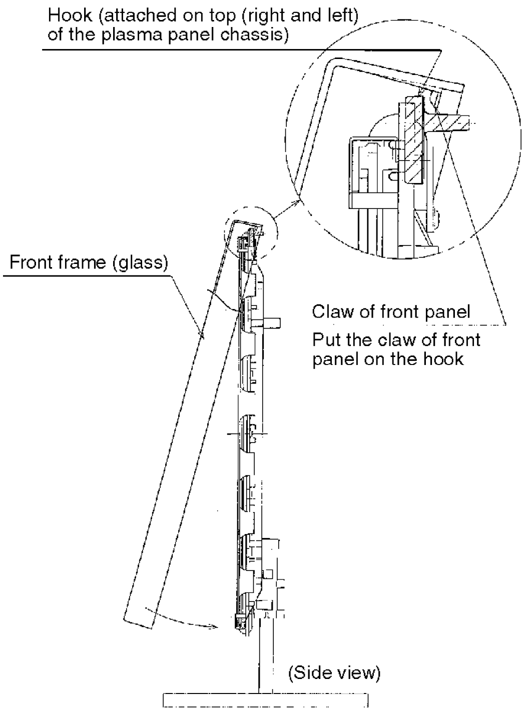

to G1
K1
K-Board
to S1

6.29. Remove the Plasma panel section from the Front frame (glass)

1. **Remove the front frame and the plasma panel fastening screws (×6 ➡).**
2. **Remove the front frame and the stand brackets fastening screws (×4⇨).**


Plasma panel
Stand bracket (right)
Stand bracket (left)

3. **For leaving the plasma panel from the front frame, pull the bottom of the front frame forward, lift, and remove.**


Hook (attached on top (right and left) of the plasma panel chassis)
Front frame (glass)
Claw of front panel
Put the claw of front panel on the hook
(Side view)

6.30. Replace the plasma panel (finished)

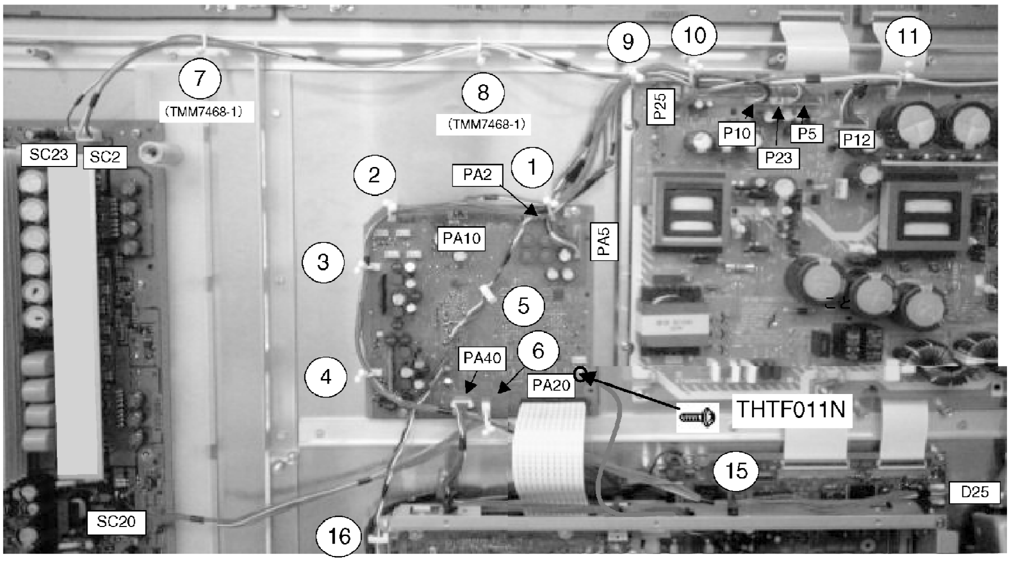
1. **Place the new plasma panel (finished) on the flat surface of the table (covered by a soft cloth), with the plasma panel surface facing downward.**
2. **Attach the C1, C2, C3, C4, C5 and the C6-Board, connect the flexible cables (×22) from the Plasma panel to the C1, C2, C3, C4, C5 and the C6-Board, and fit the flexible cable holders.**
3. **Attach the Hooks (left, right) and fit the stand brackets (L, R) to the new plasma panel.**
4. **Place the plasma panel section on the servicing stand.**
5. **Attach the front frame and each P.C.Board and so on, to the new plasma panel.**

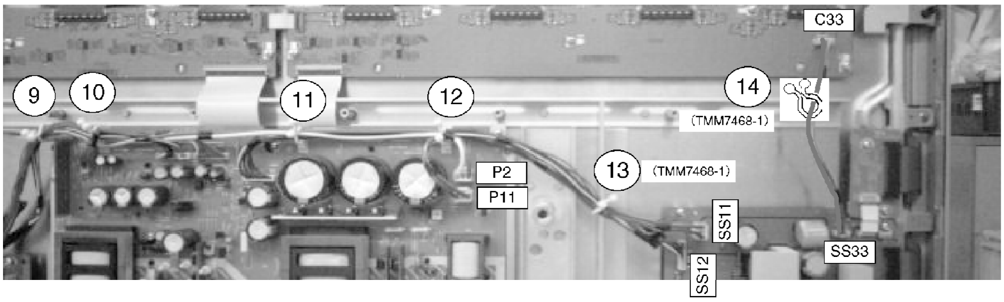
*** When fitting the front frame, be careful to allow any debris, dust or handling residue to remain between the front glass and plasma panel.**

7. Location of Lead Wiring

7.1. Lead of Wiring (1)

The wire is dressed as shown in figure.


9
10
11
7
(TMM7468-1)
8
(TMM7468-1)
P25
P10
P5
P23
P12
SC23
SC2
2
PA2
1
PA10
PA5
3
5
PA40
6
4
PA20
THTF011N
15
D25
SC20
16

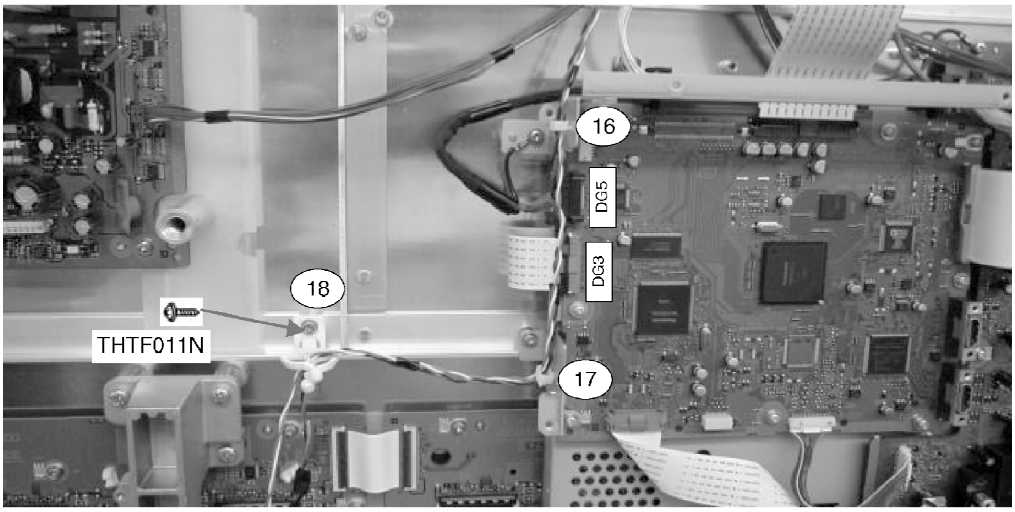

C33
9
10
11
12
14
(TMM7468-1)
P2
P11
13
(TMM7468-1)
SS11
SS33
SS12

CON:No-CON:No	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	⑯
SC2 - P2							○	○	○	○	○	○				
SC23 - P23							○	○	○	○						
SC20 - D20						○										
PA2 - RELAY					○											○
PA5 - P5	○								○	○						
PA10 - P10	○								○	○						
P11 - SS11												○	○			
P12 - SS12											○	○	○			
P25 - D25	○	○	○	○		○			○	○					○	
C33 - SS33														○		
H40 - PA40																
DG20 - PA20																

☐ Connector connection
CON: No (Connector No.)

7.2. Lead of Wiring (2)

The wire is dressed as shown in figure.

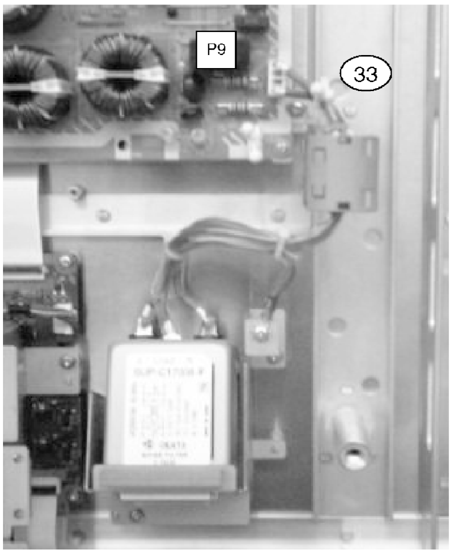

16
DG5
DG3
18
THTF011N
17

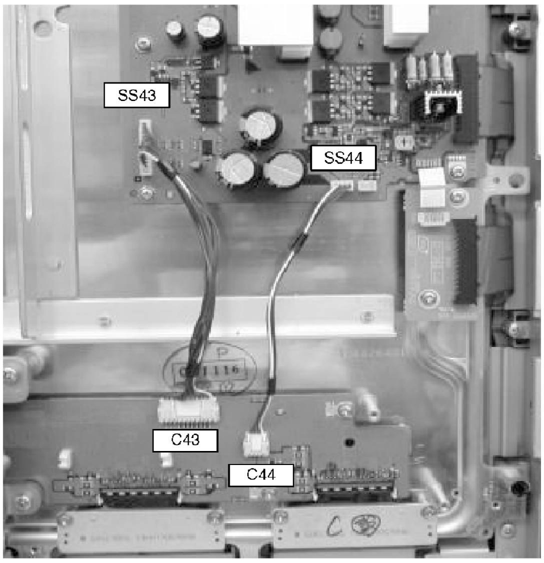
CON:No-CON:No	⑯	⑰	⑱	⑲				
DG3 - D3								
DG5 - D5								
PA2 - RELAY	○	○	○					

☐Connector connection
CON: No (Connector No.)

7.3. Lead of Wiring (3)

The wire is dressed as shown in figure.



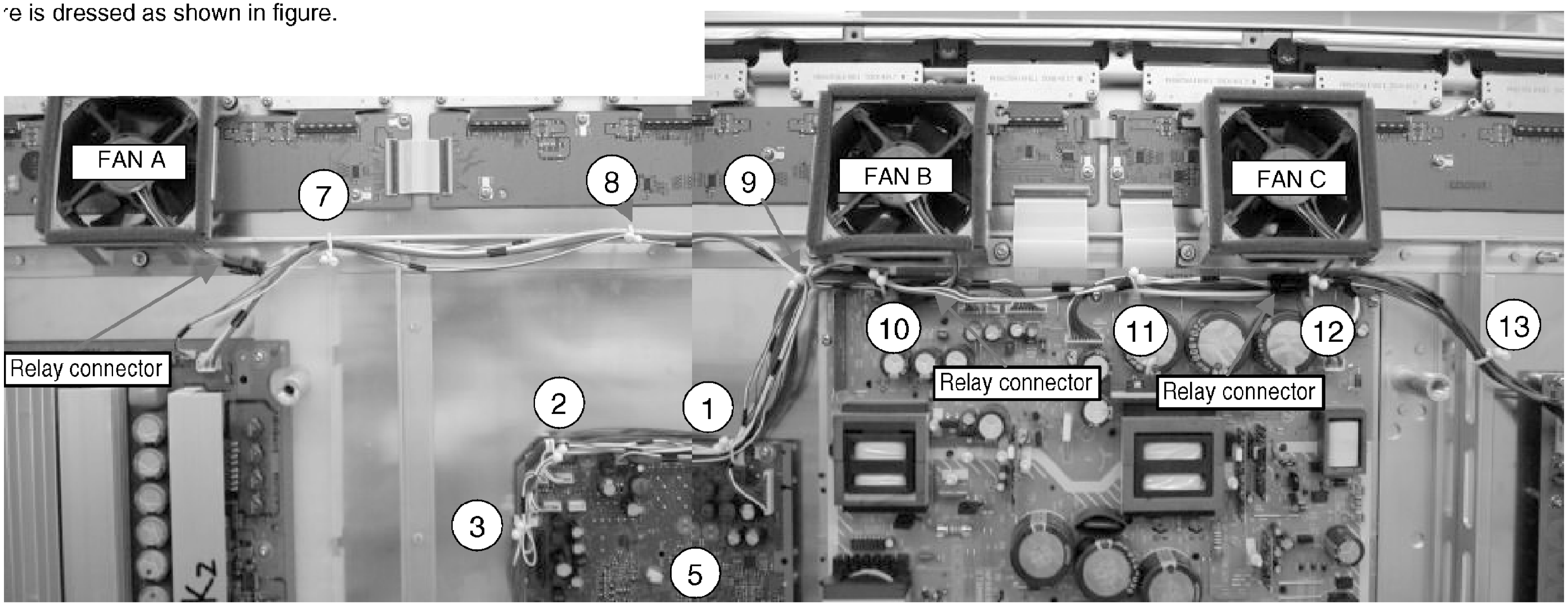

SS43
SS44
C43
C44

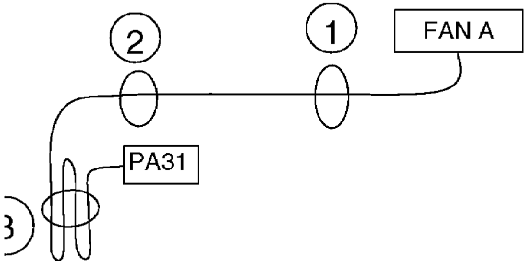
CON:No-CON:No	㉝							
AC - P9	○							
AC - GND								
SS43 - C43								
SS44 - C44								

☐Connector connection
CON: No (Connector No.)

7.4. Lead of Wiring (4)

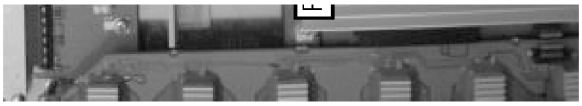
re is dressed as shown in figure.


FAN A
FAN B
FAN C
Relay connector
Relay connector
Relay connector
1
2
3
5
7
8
9
10
11
12
13
K2


FAN A
1
2
PA31
3

CON:No-CON:No	①	②	③	④	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭
FAN A - PA31	○	○	④		○	○	○					
FAN B - PA32	○	○					○	○				
FAN C - PA33	○	○					○	○	○	○		

□Connector connection
CON: No (Connector No.)

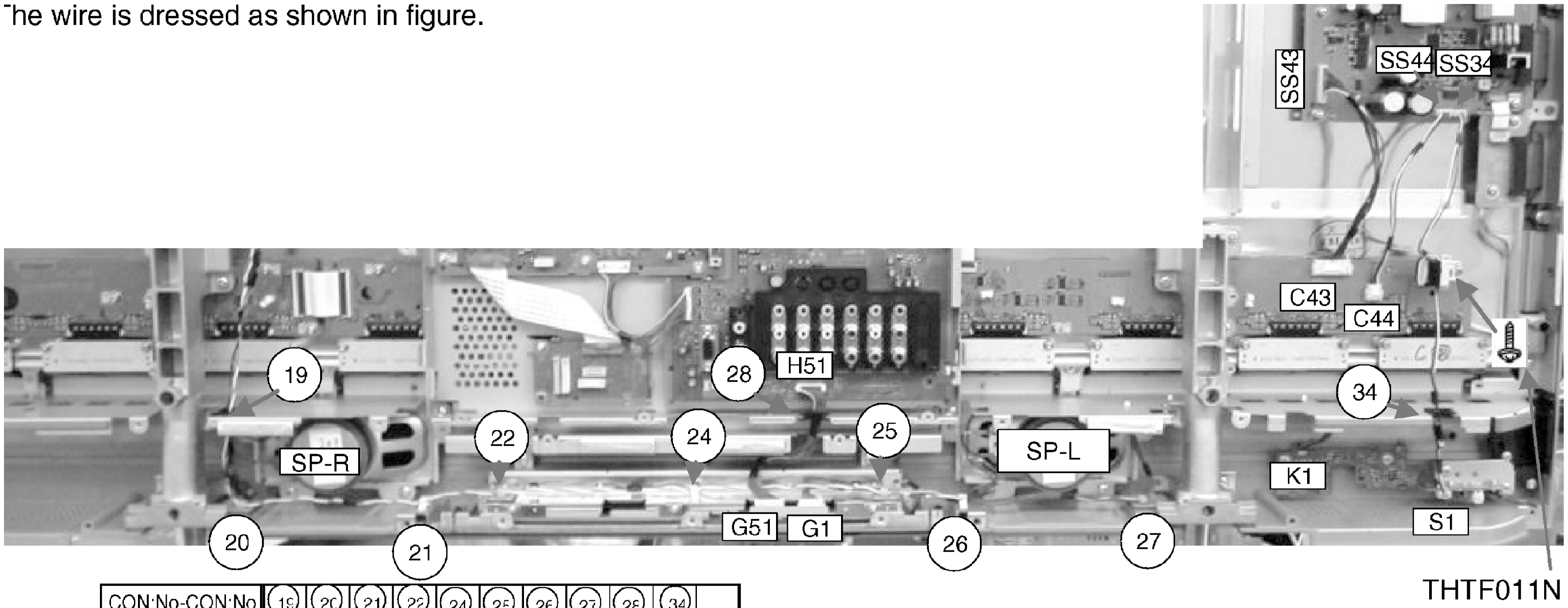


The wir

③

7.5. Lead of Wiring (5)

ˉhe wire is dressed as shown in figure.


SS43
SS44
SS34
C43
C44
19
28
H51
34
22
24
25
SP-R
SP-L
K1
S1
G51
G1
20
21
26
27
THTF011N

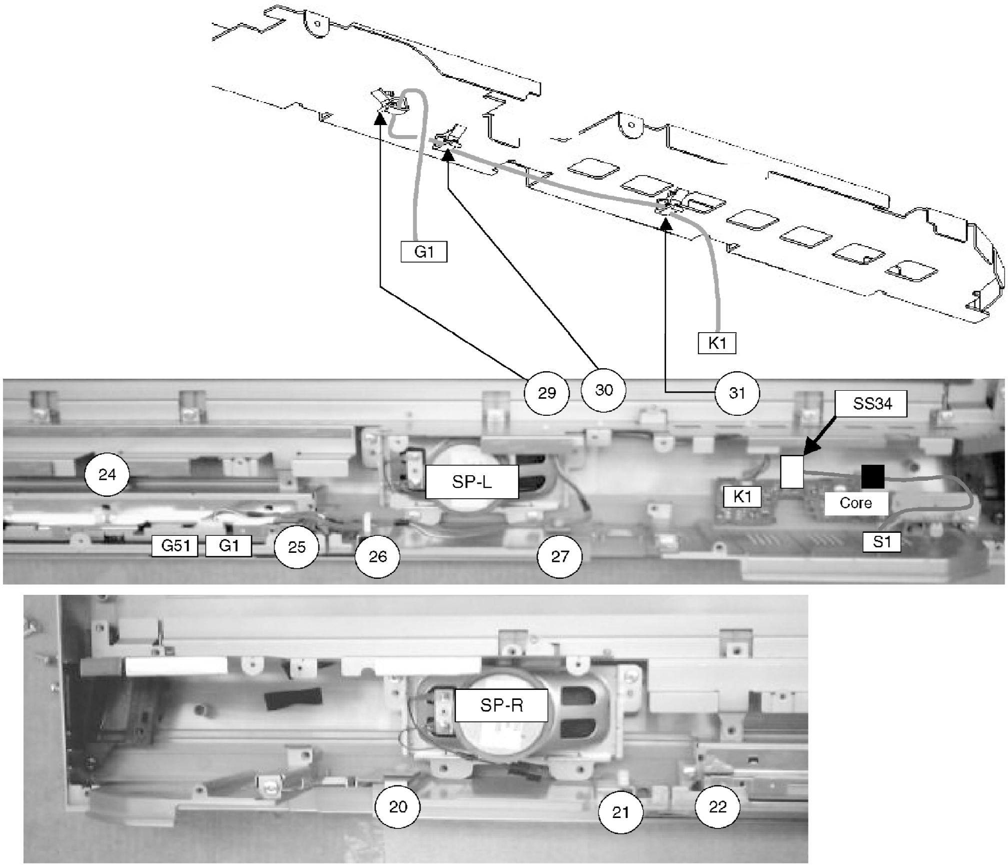
CON:No-CON:No	⑲	⑳	㉑	㉒	㉔	㉕	㉖	㉗	㉘	㉞	
PA2 - SP-R	○	○									
PA2 - SP-L	○	○	○	○	○	○	○				
H51 - G51									○		
K1 - G1						○	○	○			
S1 - SS34										○	
C43 - SS43											
C44 - SS44											

☐ Connector connection

CON: No (Connector No.)

7.6. Lead of Wiring (6)

The wire is dressed as shown in figure.


G1
K1
29
30
31
SS34
24
SP-L
K1
Core
G51
G1
25
26
27
S1
SP-R
20
21
22

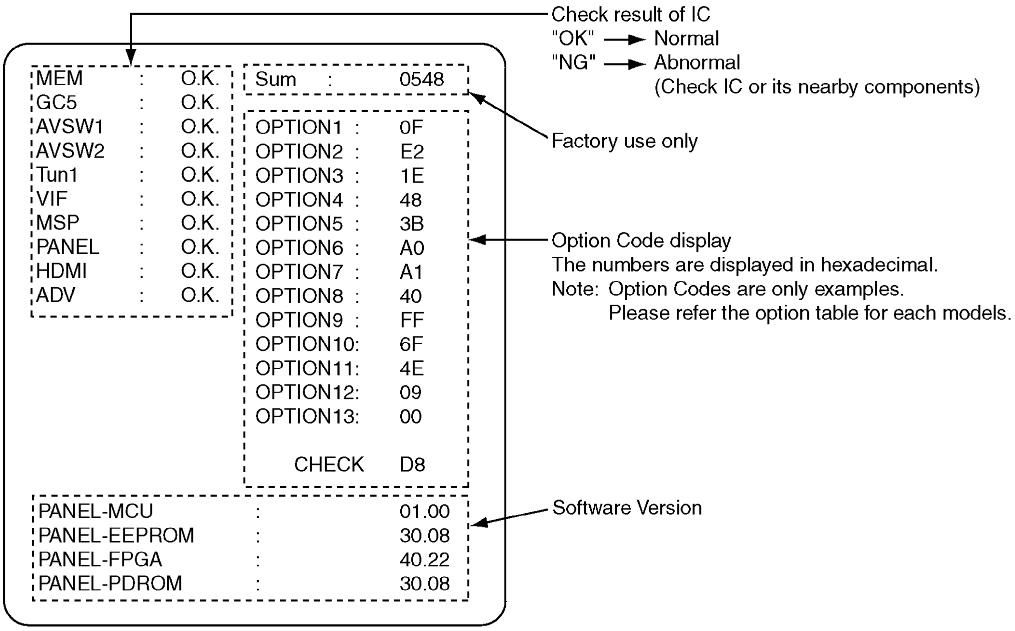
CON:No-CON:No	⑳	㉑	㉒		㉔	㉕	㉖	㉗		㉙	㉚	㉛
K1 - G1						○	○	○		○	○	○
S1 - SS34												
SP-L - RELAY												
SP-R - RELAY												

☐ Connector connection
CON: No (Connector No.)

8. Self-check Function

1. **Self-Check is used to automatically check the bus lines and hexadecimal code of the TV set.**

2. **To get into the Self -Check mode press the Down (—/∨) button on the customer controls at the front of the set, at the same time pressing the Recall button on the remote control, and the screen will show :**



```
MEM        :   O.K.    Sum     :        0548
GC5        :   O.K.
AVSW1      :   O.K.    OPTION1  :   0F
AVSW2      :   O.K.    OPTION2  :   E2
Tun1       :   O.K.    OPTION3  :   1E
VIF        :   O.K.    OPTION4  :   48
MSP        :   O.K.    OPTION5  :   3B
PANEL      :   O.K.    OPTION6  :   A0
HDMI       :   O.K.    OPTION7  :   A1
ADV        :   O.K.    OPTION8  :   40
                       OPTION9  :   FF
                       OPTION10:    6F
                       OPTION11:    4E
                       OPTION12:    09
                       OPTION13:    00

                            CHECK   D8

PANEL-MCU              :            01.00
PANEL-EEPROM           :            30.08
PANEL-FPGA             :            40.22
PANEL-PDROM            :            30.08
```

Check result of IC
"OK" → Normal
"NG" → Abnormal
(Check IC or its nearby components)

Factory use only

Option Code display
The numbers are displayed in hexadecimal.
Note: Option Codes are only examples.
Please refer the option table for each models.

Software Version

If the CCU ports have been checked and found to be incorrect or not located then “--” will appear in place of “O.K.”.

Display	Ref.No.	Description	Board
MEM	**IC1102**	**EEPROM**	**DG-Board**
GC5	**IC4037**	**GC5 Processor**	**DG-Board**
AVSW1	**IC3005**	**Video SW**	**H-Board**
AVSW2	**IC2105**	**Audio SW**	**H-Board**
Tun1	**TU001**	**Tuner (Main)**	**TA-Board**
VIF	**-**	**-**	**-**
MSP	**IC2106**	**Multi Sound Processor**	**H-Board**
PANEL	**IC9003**	**Convert Micon**	**D-Board**
HDMI	**IC4026**	**HDMI I/F Receiver**	**DG-Board**
ADV	**IC4019**	**10bit A/D**	**DG-Board**

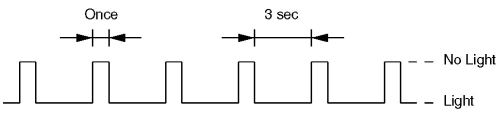
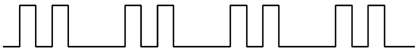
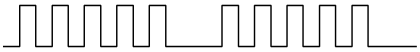
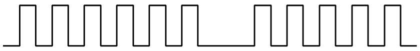
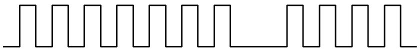
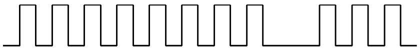
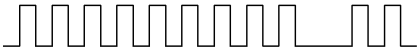
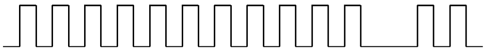
8.1. Power LED Blinking timing chart

1. Subject

Information of LED Flashing timing chart.

2. Contents

When an abnormality has occurred the unit, the protection circuit operates and reset to the stand by mode. At this time, the defective block can be identified by the number of blinkes of the Power LED on the front panel of the unit.

Blinking Times	Blinking timing	Contents	Check point
1	 Once 3 sec No Light Light	No particular check point	-
2		15V SOS	D-Board
3		3.3V SOS	D-Board
4		Power SOS	P-Board
5		5V SOS	D-Board
6		Driver SOS1 (SC Energy recovery circuit)	SU-Board SD-Board SC-Board
7		Driver SOS2 (SC floating voltage area)	SU-Board SD-Board SS-Board
8		Driver SOS3 (SS Energy recovery circuit)	SS-Board
9		Panel Status	-
10		PA SOS Tuner SOS	PA-Board H-Board
11		Fan SOS	Fan
12		Sound SOS	PA-Board

8.2. No Power

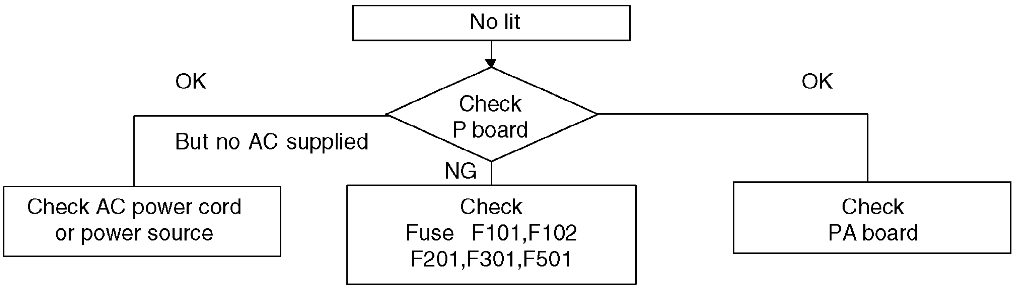
[First check point]

There are following 2 states of No Power indication by power LED.

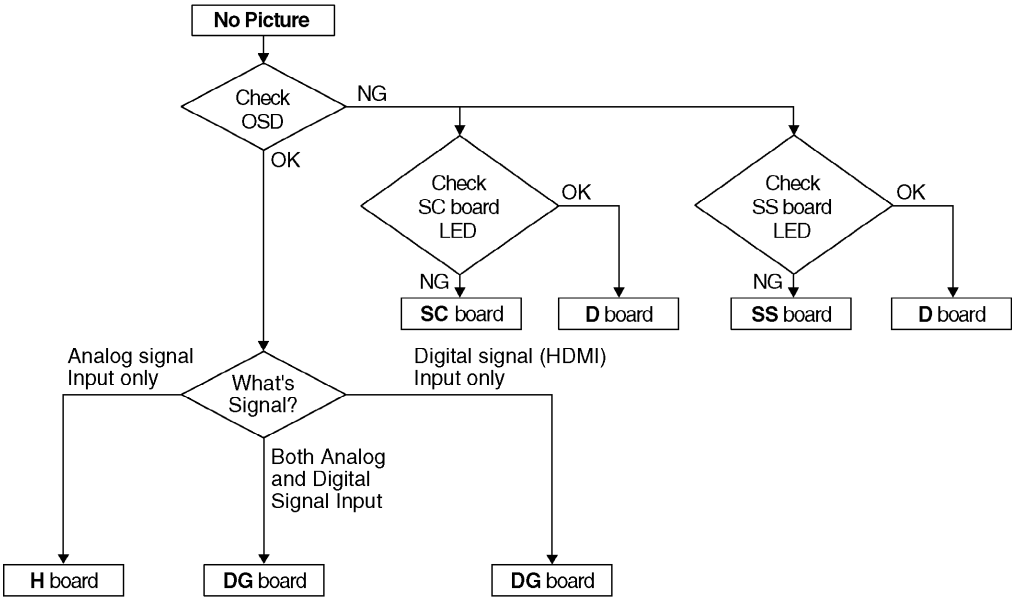
1. No lit

2. Green is lit then turns red blinking a few seconds later. (See 8.1.)

3. Only red is lit.

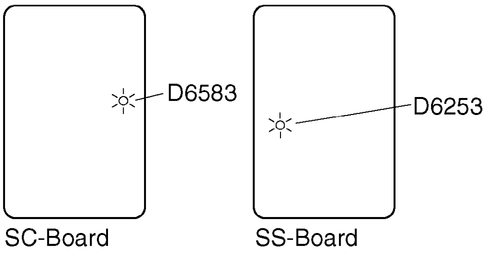

No lit
OK
Check
P board
OK
But no AC supplied
NG
Check AC power cord
or power source
Check
Fuse F101,F102
F201,F301,F501
Check
PA board

8.3. No Picture



No Picture
Check OSD
NG
OK
Check SC board LED
OK
NG
SC board
D board
Check SS board LED
OK
NG
SS board
D board
Analog signal Input only
What's Signal?
Digital signal (HDMI) Input only
Both Analog and Digital Signal Input
H board
DG board
DG board

Drive circuits LED indicator

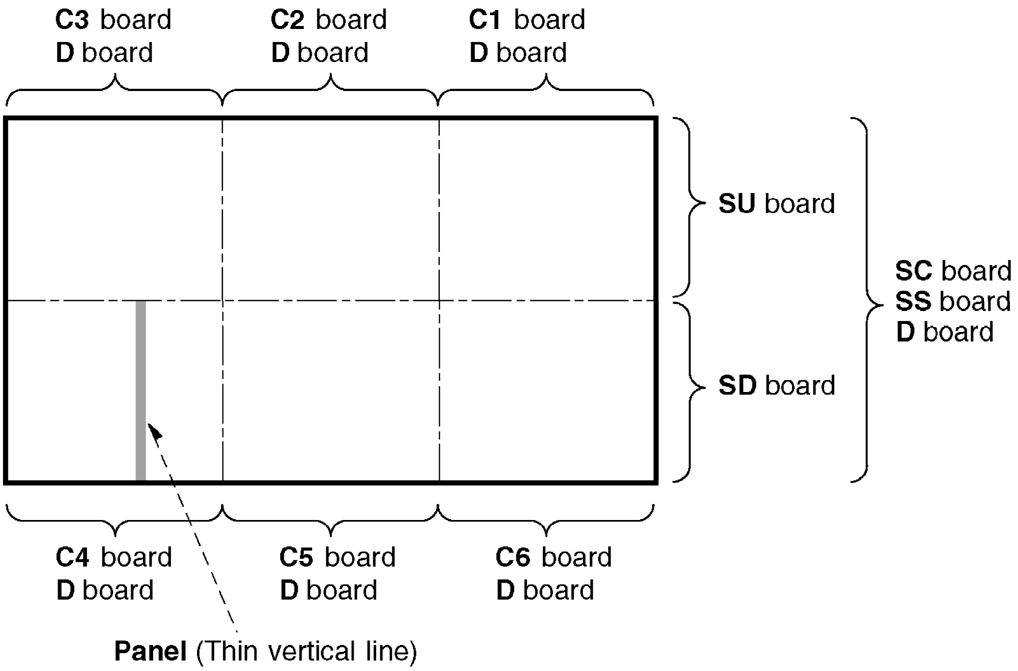


D6583
D6253
SC-Board
SS-Board

8.4. Local screen failure

Plasma display may have local area failure on the screen. Fig-1 is the possible defect P.C.B. for each local area.

Fig-1


C3 board
D board
C2 board
D board
C1 board
D board
SU board
SC board
SS board
D board
SD board
C4 board
D board
C5 board
D board
C6 board
D board
Panel (Thin vertical line)

<Local screen failure chart>

9. Service Mode Function

MPU controls the functions switching for each IICs through IIC bus in this chassis. The following setting and adjustment can be adjusted by remote control in Service Mode.

9.1. How to enter SERVICE 1

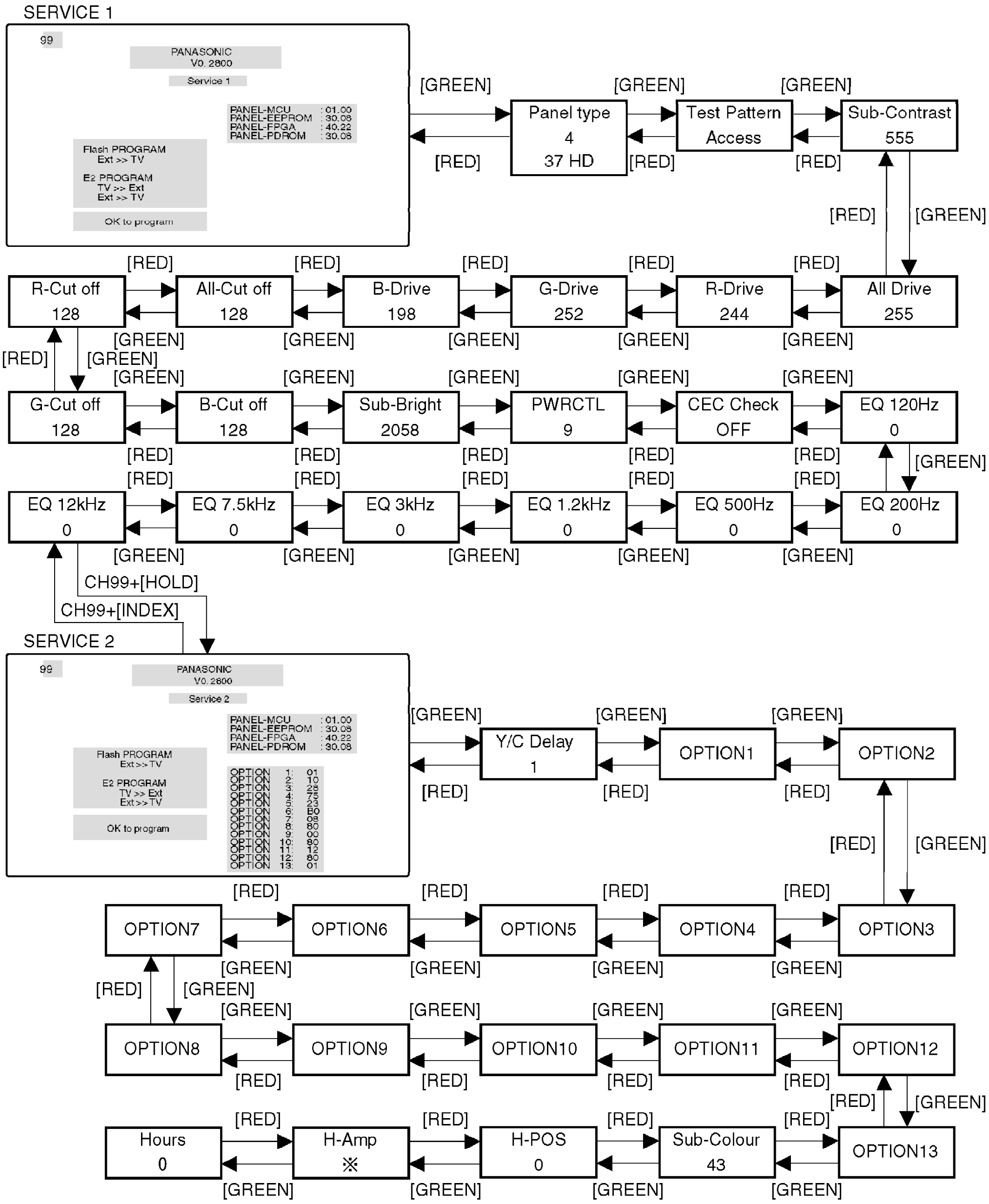
1. **In sound menu, set BASS to MAXIMUM, and set TREBLE to MINIMUM.**
2. **Simultaneously press INDEX button on remote control and DOWN button [—/∨] on the TV set.**

9.2. How to enter SERVICE 2

1. **Set the channel to CH99.**
2. **Select the EQ 12kHz.**
3. **Press HOLD button on remote control.**

Note:

To exit to Service mode, press EXIT or Power button on remote control.


SERVICE 1
99
PANASONIC
V0. 2800
Service 1
PANEL-MCU : 01.00
PANEL-EEPROM : 30.08
PANEL-FPGA : 40.22
PANEL-PDROM : 30.08
Flash PROGRAM
Ext >> TV
E2 PROGRAM
TV >> Ext
Ext >> TV
OK to program
[GREEN]
[RED]
Panel type
4
37 HD
Test Pattern
Access
Sub-Contrast
555
All Drive
255
R-Drive
244
G-Drive
252
B-Drive
198
All-Cut off
128
R-Cut off
128
G-Cut off
128
B-Cut off
128
Sub-Bright
2058
PWRCTL
9
CEC Check
OFF
EQ 120Hz
0
EQ 200Hz
0
EQ 500Hz
0
EQ 1.2kHz
0
EQ 3kHz
0
EQ 7.5kHz
0
EQ 12kHz
0
CH99+[HOLD]
CH99+[INDEX]
SERVICE 2
99
PANASONIC
V0. 2800
Service 2
PANEL-MCU : 01.00
PANEL-EEPROM : 30.08
PANEL-FPGA : 40.22
PANEL-PDROM : 30.08
Flash PROGRAM
Ext >> TV
E2 PROGRAM
TV >> Ext
Ext >> TV
OK to program
OPTION 1: 01
OPTION 2: 10
OPTION 3: 28
OPTION 4: 75
OPTION 5: 23
OPTION 6: B0
OPTION 7: 08
OPTION 8: 80
OPTION 9: 00
OPTION 10: 80
OPTION 11: 12
OPTION 12: 80
OPTION 13: 01
Y/C Delay
1
OPTION1
OPTION2
OPTION3
OPTION4
OPTION5
OPTION6
OPTION7
OPTION8
OPTION9
OPTION10
OPTION11
OPTION12
OPTION13
Sub-Colour
43
H-POS
0
H-Amp
※
Hours
0

※ : This item appears when "component" selecting

Key Command

- Press the **RED/GREEN** button to step up/down through the functions.
- Press the **YELLOW/BLUE** button to change the function values.
- Press the **OK** button after each adjustment has been mode to store the required values.

9.3. Option Description

		PV60A		
option1		4D		
	b0	1	Colour system	Auto(1)
	b1	0		SECAM(1)
	b2	1		NTSC(1)
	b3	1		M.NTSC(1)
	b4	0	A2 select 6.5MHz	5.742MHz(0) 6.742MHz(1)
	b5	0	SIF	4.5/5.5/6.0/6.5(0),5.5/6.0/6.5(1)
	b6	1		5.5/6.5(2),6.0/6.5(3)
	b7	0	free	
option2		22		
	b0	0	A2 enable	4.5(1)
	b1	1		5.5(1)
	b2	0		6.0(1)
	b3	0		6.5(1)
	b4	0	NICAM enable	4.5(1)
	b5	1		5.5(1)
	b6	0		6.0(1)
	b7	0		6.5(1)
option3		3A		
	b0	0	SASO enable	SASO enable(1)
	b1	1	Fine tuning	Enable(1)
	b2	0	Search speed	Slow(1) Fast(0)
	b3	1	Tuner	MACO tuner (1), Others (0)
	b4	1	HYPER	UHF only (0), UHF/VHF (1)
	b5	1	IF I2C	I2C controlled Tuner IF module (1)
	b6	0	NICAM C4 bit	enable(1)
	b7	0	Blue Back	BLUE BACK on/off selection in menu(0)
option4		D8		
	b0	0	Aspect AUTO	enable(1)
	b1	0	S1/S2 enable	enable(1)
	b2	0	ID-1	enable(1)
	b3	1	User aspect Just	enable(1)
	b4	1	User aspect 14:9	enable(1)
	b5	0	ALBD 14:9	14:9 enable, Zoom3 disable at self wide(1)/ Zoom1, Zoom3 enable at self wide (0)
	b6	1	TEXT	enable(1)
	b7	1	TEXT TOP	TOP enable (1)
option5		23		
	b0	1	CH Blanking	Blanking enable (1)
	b1	1	AV Blanking	Blanking enable (1)
	b2	0	Noise mute	Noise mute enable(0)
	b3	0	sub picture	without sub-picture(0), with sub-picture(1)
	b4	0	2tuner	2tuner(1),1tuner(0)
	b5	1	AV Input	3rotation(1) / 2rotation without front RCA (0)
	b6	0	Panel (LCD)	Samsung Panel(1)/SHARP Panel(0)
	b7	0	Large size (LCD)	32(1)/26(0) for LCD
option6		A0		
	b0	0	SD module	with SD module (1)
	b1	0	SD module Ext.Rec(PAL)	enable(1)
	b2	0	SD module Ext.Rec(NTSC)	enable(1)
	b3	0	SD module Ext.Rec(SECAM)	enable(1)
	b4	0	IDTV	enable(1)
	b5	1	HDMI	enable(1)
	b6	0	Ext. HV input	without HV input(0) / with HV input(1)
	b7	1	PC	enable(1)
option7		93		
	b0	1	Asia	Asia(1),europe(0)
	b1	1	Australia	Australia(1)
	b2	0	Ireland/India	India(1)
	b3	0	UK/Korea	Korea(1)
	b4	1	Lang1	Large(0)/Small(1)
	b5	0	Lang2	OSD language:With Arabic(1)
	b6	0	Lower POS	Lower POS enable(1)
	b7	1	Owner ID	Enable(1)

		PV60A		
option8		40	**Euro option**	
	b0	0	ACI all country	ACI enable(1), only Netherlands(0)
	b1	0	ACI auto MP	ACI auto multi package enable (1)
	b2	0	ACI offset	ACI offset for VCR prog. enable(1)
	b3	0	Power up EC-Mode	Power on EC enable (1)
	b4	0	AVLink	Q-Link off selectable in menu (1)
	b5	0	Volume correction	TV Volume coorrection enable (1)
	b6	1	MPX/NICAM display	Display NICAM (0), Display MPX (1)
	b7	0	Albd Reset Off	enable(1)
option9		06		
	b0	0	CH Plan	ASIA / M.E. / HK/UK / CHINA(1)
	b1	1		NZ/INDNES(1)
	b2	1		AUSTRALIA(1)
	b3	0		E.EUROPE(1)
	b4	0		SPECIAL(1)
	b5	0		AMERICA(1)
	b6	0		CATV(1)
	b7	0		JAPAN(1)
option10		08		
	b0	0	NICAM priority	ASIA/M.E.(1)
	b1	0		HK/UK(1)
	b2	0		CHINA(1)
	b3	1		NZ/INDN(1)
	b4	0		AUSTRA(1)
	b5	0		E.EURO(1)
	b6	0		SPECIAL(1)
	b7	0	HDMI AVI Aspect	enable(1)
option11		4E	**Additional**	
	b0	0	Remocon Type	Delux(1) / Leader(0)
	b1	1	Environment AI (PDP)	enable, with viewing mode auto (1) / disable, without viewing mode auto(0)
	b2	1	WSS14:9 off	WSS 14:9 off (1)
	b3	1	Child lock	Child Lock on:Tuning Menu skip(1)
	b4	0		
	b5	0	Contrast AI	enable(1)
	b6	1	Service H-POS	enable(1)
	b7	0	Service V-VOS	enable(1)
option12		09	**Additional**	
	b0	1	last memory of aspect	each source(1) / ALL source(0)
	b1	0	Reserved	
	b2	0	TEXT Ch Refresh	refresh enable(1) / disenable(0)
	b3	1	STILL	1:Disable / 0:Enable
	b4	0	LATIN	Latin:SAP/Fixed SIF4.5MHz/PAL-M,N/CC/Black level/Language
	b5	0	SRS	enable(1)
	b6	0	HDMI Quali TV	enable(0)
	b7	0	HDMI EC function	enable(1)
option13		00	**Additional**	
	b0	0	DVB ALBD	enable(1)
	b1	0	HDMI port	enable(0) 2 ports model/(1)1port model (only for TV MCU port setting)
	b2	0	HDMI format error OSD	display(0)/not display(1)
	b3	0	CEC control	enable(0)
	b4	0	Aspect 4:3 FULL	enable(0)
	b5	0	FTZ	enable(1)
	b6	0		
	b7	0		

10. Adjustment Procedure

10.1. Driver Set-up

10.1.1. Item / Preparation

1. Input a white signal to plasma video input.

2. Set the picture controls as follows.
Picture menu: Dynamic
D.PNR: OFF
Aspect: 16:9

Caution

1. First perform Vsus adjustment.

2. Confirmation of Vscn voltage should be performed after

confirmation of Vad adjustment.
When Vad=-105V, Voltage of Vscn is 35V ±4V.

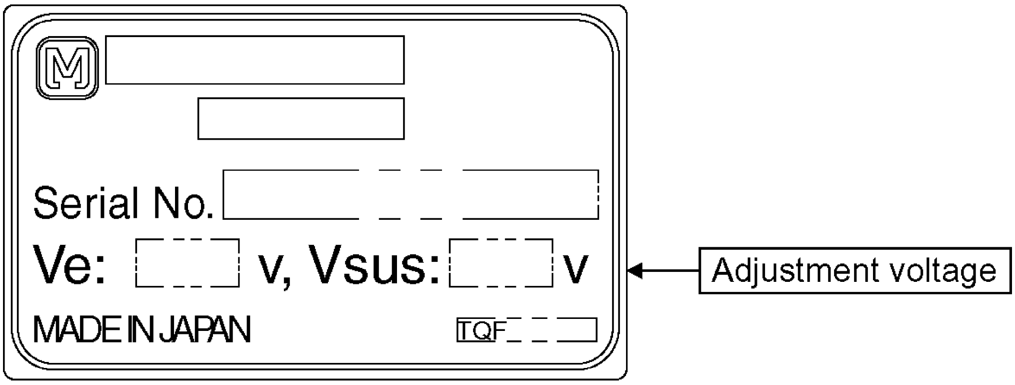
10.1.2. Adjustments

Adjust driver section voltages referring the panel data on the panel data label.
Check or adjust the following voltages with the multimeter.

Name	Test Point	Voltage	Volume	Remarks
Vsus	TPVSUS (SS)	Vsus ± 2V	VR251 (P)	*
Ve	TPVE (SS)	Ve ± 2V	VR6000 (SS)	*
Vset	TPVSET (SC)	280V ± 7V	Fixed	
Vad	TPVAD (SC)	-105V ± 1V	VR6600 (SC)	
Vscn	TPVSCN (SC)	Vad+140V ± 4V	Fixed	
Vda	TPVDA (SS)	75V ± 1V	Fixed	

***See the Panel label.**

Panel Label information



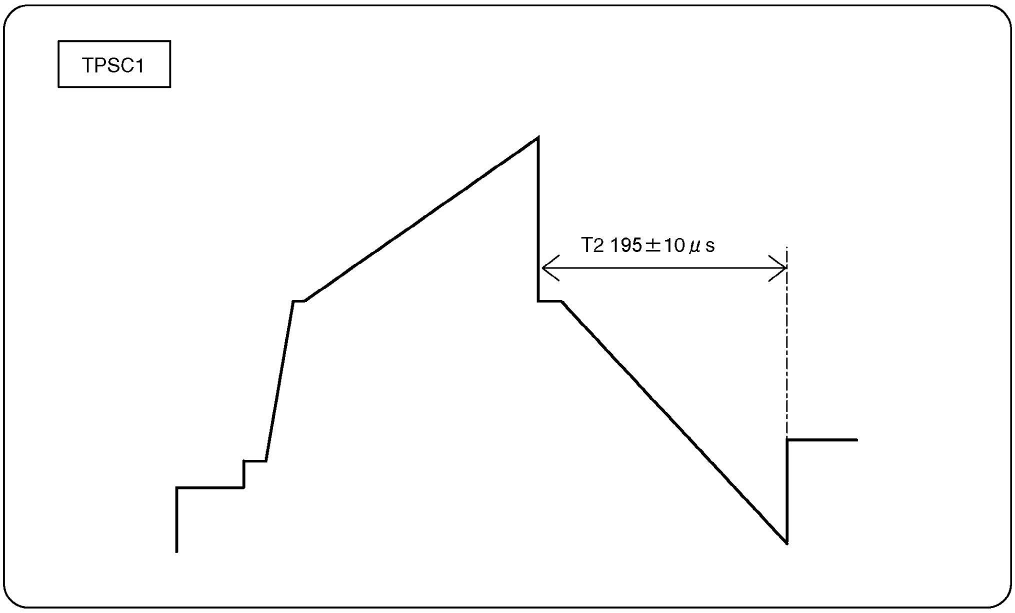
10.2. Initialization Pulse Adjust

1. Input the White signal to plasma video input.

2. Set the picture controls as follows.
Picture menu : Dynamic
D.PNR : OFF
Aspect : 16:9

3. Connect Oscilloscope to TPSC1 (T2) and adjust VR6602 for 195+ 10 μ Sec.

	Test point	Volume	Level
T2	TPSC1 (SC)	VR6602 (SC)	195 ± 10 μ Sec



10.3. P.C.B. (Printed Circuit Board) exchange

10.3.1. Caution

1. **To remove P.C.B. , wait 1 minute after power was off for discharge from electrolysis capacitors.**

10.3.2. Quick adjustment after P.C.B. exchange

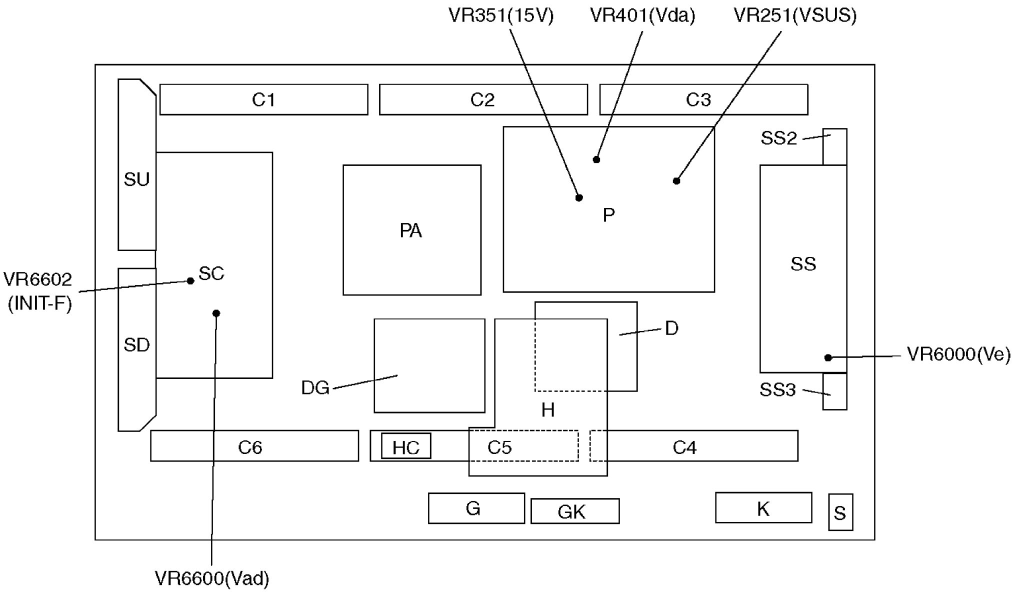
P.C.B.	Name	Test Point	Voltage	Volume	Remarks
P Board	Vsus	TPVSUS (SS)	Vsus ± 2V	VR251 (P)	*
SC Board	Vad	TPVAD (SC)	-105V ± 1V	VR6600 (SC)	
SS Board	Ve	TPVE (SS)	Ve ± 2V	VR6000 (SS)	*
D, DG Board	White blance, Pedestal and Sub brightness for NTSC, PAL, HD, PC and 625i signa				

***See the Panel label.**

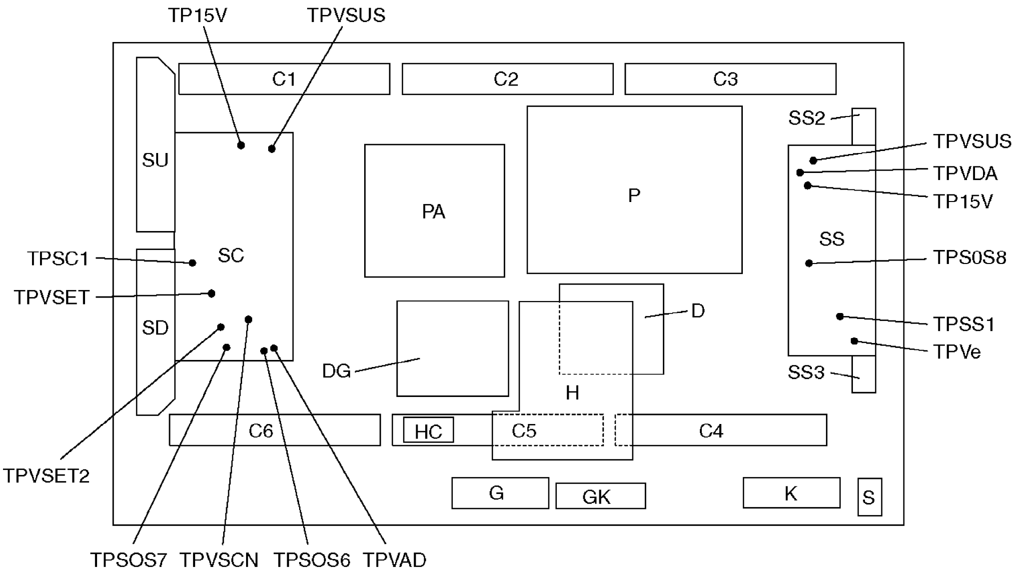
Caution:

Absolutely do not reduce Vsus below Ve not to damage the P.C.B.

10.4. Adjustment Volume Location


VR351(15V)
VR401(Vda)
VR251(VSUS)
C1
C2
C3
SU
PA
P
SS2
SS
VR6602
(INIT-F)
SC
SD
D
DG
H
VR6000(Ve)
SS3
C6
HC
C5
C4
G
GK
K
S
VR6600(Vad)

10.5. Test Point Location


TP15V
TPVSUS
C1
C2
C3
SS2
SU
PA
P
TPVSUS
TPVDA
TP15V
SS
TPSC1
SC
TPS0S8
TPVSET
SD
D
TPSS1
TPVe
DG
SS3
H
C6
HC
C5
C4
TPVSET2
G
GK
K
S
TPSOS7
TPVSCN
TPSOS6
TPVAD

11. Adjustment

11.1. PAL panel white balance adjustment

Instrument Name	Connection	Remarks
-W/B pattern -Color analyzer (Minolta CA-100 or equivalent)	RF input Panel surface	User setting: Normal

Procedure	Remarks
-Asing time is longer than 15min. -Make sure the front panel to be used on the final set is fitted. -Make sure a color signal is not being shown before adjustment. -Put the color analyzer where there is little colour variation. Complete the adjustment within 10 minutes after the turn on electricity. Turn on the power supply again when it is not possible to complete it by aging etc.	Picture menu : Dynamic ASPECT : 16:9

1. Display the white balance pattern.
2. Check that the color balance is “cool”.
3. Enter the <Service1> mode.
4. Select “G-CUTOFF” item, using the color-key “Red” or “Green”, and set to “128”, using the color-key “Yellow” or “Blue”.
Also, “B-CUTOFF” and “R-CUTOFF” set to “128”.
5. Set “G-DRIVE” at “208”.
6. Touch the signal receiver of color analyzer to the highlight window’s center, and adjust B drive and R drive so x, y become the “Color balance Cool” in the below table.
7. Set “ALL-DRIVE” to “252”.
8. Set colorbalance to “STANDARD”.
9. Fix G cutoff , B cutoff and R cutoff at “128”.
10. Fix G drive at “208”.
11. Adjust B drive and R drive so the highlight window’s x, y become the “Color balance “STANDARD” in the below table.
12. Set “ALL-DRIVE” to “252”.
13. Set color balance to “Warm”.
14. Set G cutoff, B cutoff and R cutoff to “128”.
15. Set G drive to “208”.
16. Adjust B drive and R drive so the highlight window’s x, y become the “Color balance Warm” shown in the below table.
17. Set “ALL-DRIVE” to “252”.

-Highlight section
Signal amplitude 75%

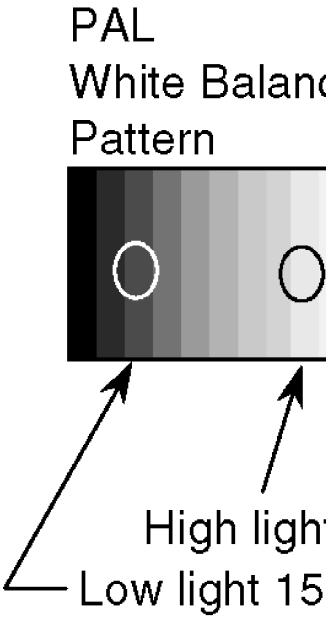


Table 1. Color balance target value

Color Temperature	x	y
Cool	0.276	0.276
Standard	0.288	0.296
Warm	0.313	0.329

11.2. HD white balance adjustment

Instrument Name	Connection	Remarks
-1080i W/B Pattern -Color analyzer(Minolta CA-100 or equivalent)	-RF input -Panel surface	**User setting: Normal**

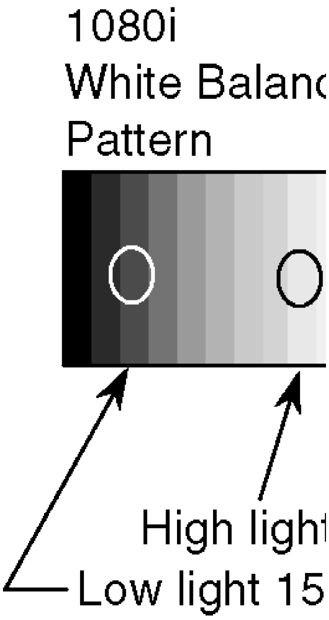
Procedure	Remarks
-Asing time is longer than 15min. -Make sure the front panel to be used on the final set is fitted. -Make sure a color signal is not being shown before adjustment. -Put the color analyzer where there is little colour variation. -Complete the adjustment within 10 minutes after the turn on electricity. Turn on the power supply again when it is not possible to complete it by aging etc.	**Picture menu: Dynamic** **ASPECT:16:9**

1. Display the white balance pattern.
2. Check that the color balance is “cool”.
3. Enter the <Service1> mode.
4. Select “G-CUTOFF” item, using the color-key “Red” or “Green”, and set to “128”, using the color-key “Yellow” or “Blue”.
Also, “B-CUTOFF” and “R-CUTOFF” set to “128”.
5. Set “G-DRIVE” at “208”.
6. Touch the signal receiver of color analyzer to the highlight window’s center, and adjust B drive and R drive so x, y become the “Color balance Cool” in the below table.
7. Set “ALL-DRIVE” to “252”.
8. Set colorbalance to “Standard”.
9. Fix G cutoff , B cutoff and R cutoff at “128”.
10. Fix G drive at “208”.
11. Adjust B drive and R drive so the highlight window’s x, y become the “Color balance “Standard” in the below table.
12. Set “ALL-DRIVE” to “252”.
13. Set color balance to “Warm”.
14. Set G cutoff, B cutoff and R cutoff to “128”.
15. Set G drive to “208”.
16. Adjust B drive and R drive so the highlight window’s x, y become the “Color balance Warm” shown in the below table.
17. Set “ALL-DRIVE” to “252”.

Table 1. Color balance target value

Color Temperature	x	y
Cool	0.276	0.276
Standard	0.288	0.296
Warm	0.313	0.329

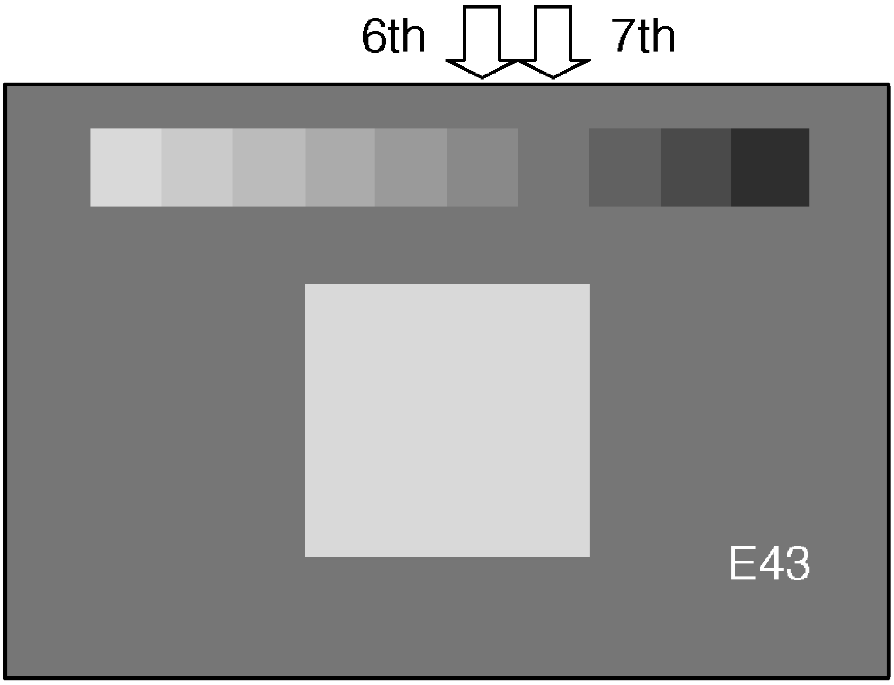
-Highlight section
Signal amplitude 75%



*** The Color balance COOL**
from Japanese model valu

11.3. Sub bright adjustment

Instrument Name	Connection	Remarks
1. PAL signal generator (or RF)	Connect to the input terminal	User setting: Normal

Procedure	Remarks
-White balance adjustment is finished for each signal. -Do adjustments in a dark room. -Complete the adjustment within 10 minutes after the turn on electricity. Turn on the power supply again when it is not possible to complete it by aging etc. 1. Display the 10 steps gray-scalepattern for adjusting subbright from video input. 2. Use "Sub-Bright" in the <Sevice1> mode to adjust so the 6th section shows up and the 7th fades away. **Data** **Sub-Bright data addresses** **Sub-Bright (upper) A0-0116** **Sub-Bright (lower) A0-0117** 	**Picture menu: Dynamic** **Color balance: Normal** **ASPECT: 16:9**

11.4. ABL adjustment

Instrument Name	Connection	Remarks
1. HD signal emitter (or Leader : 1080i/No.9 signal) 2. Wattmeter	**COMPONENT input terminal** **Connect the AC power of the set to the wattmeter.**	

Procedure	Remarks

-Make sure the set is aged for 30 minutes or more before adjustment.
(Do not switch off during or after aging.)

-Voltage 230V 50Hz (variation within 1%)

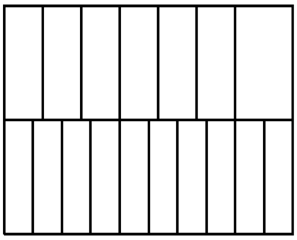
-Volume at minimum and screen size at “16:9”
Component input, dynamic, standard

1. Connect the set's AC power to the wattmeter.
2. Input the signal (top half: color bar, Bottom half :Horizontal 10steps bar).
3. Select the “PWRCTL” item in the <Service1> mode.
4. Adjust PWRCTL so the set's power consumption is
438 ±10W

Remarks

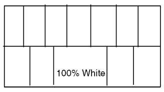
1. The initial data are
Data address: A0-0102
Default data: 0x00
2. The power and data are in reverse relationship.
(Lower the data to raise the power.)

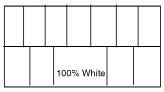
-Raising direction (↑): 0 → 255, 254, 253
-Lowering direction (↓): 0 → 1, 2, 3
3. There is a possibility that the adjustment value can do two places, adjust it in that case, that the value of PWRCTL is large.

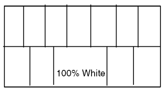


No.9 Signal
Top half: Full color bar
Bottom half: Horizontal 10 steps bar

11.5. Sub-Contrast adjustment

<table>
<tr><th>Name of measuring instrument</th><th>Connection</th><th>Remarks</th></tr>
<tr><td>RF generator
Base Band generator</td><td></td><td></td></tr>
<tr><th colspan="2">Preparation (AV)</th><th>Remarks</th></tr>
<tr><td colspan="2">1. Receive AV1 (PAL 100% Full White or Split Colour bar shown as below) .


2. Goes into service mode, choose Sub-Contrast, and it checks that data value is 512.
(It checks that an initial value is a default)</td><td></td></tr>
<tr><th colspan="2">Adjustment of AV system</th><th>Remarks</th></tr>
<tr><td colspan="2">1. The colour key yellow button of remote control is pushed.
2. The OSD character of sub-contrast becomes red.
(Inside under automatic adjustment)
3. The OSD character of sub-contrast returns to white.
4. End.</td><td></td></tr>
<tr><th colspan="2">Preparation (RF)</th><th>Remarks</th></tr>
<tr><td colspan="2">1. Receive a RF (PAL 100% Full White or Split Colour bar shown as below.)


2. Goes into service mode, choose Sub-Contrast, and it checks that data value is 512.
(It checks that an initial value is a default)</td><td></td></tr>
<tr><th colspan="2">Adjustment of RF system</th><th>Remarks</th></tr>
<tr><td colspan="2">1. The colour key yellow button of remote control is pushed.
2. The OSD character of sub-contrast becomes red.
(Inside under automatic adjustment)
3. The OSD character of sub-contrast returns to white.
4. End.</td><td></td></tr>
<tr><th colspan="2">Preparation (HD)</th><th>Remarks</th></tr>
<tr><td colspan="2">1. Receive Component
(1080i/ 60Hz or 1080i/ 50Hz, 100% Full White or Split colour bar as shown below.)


2. Goes into service mode, choose Sub-Contrast, and it checks that data value is 384.
(It checks that an initial value is a default)</td><td></td></tr>
<tr><th colspan="2">Adjustment of HD system</th><th>Remarks</th></tr>
<tr><td colspan="2">1. The colour key yellow button of remote control is pushed.
2. The OSD character of sub-contrast becomes red.
(Inside under automatic adjustment)
3. The OSD character of sub-contrast returns to white.
4. End.</td><td></td></tr>
</table>

12. Hotel mode

1. Purpose

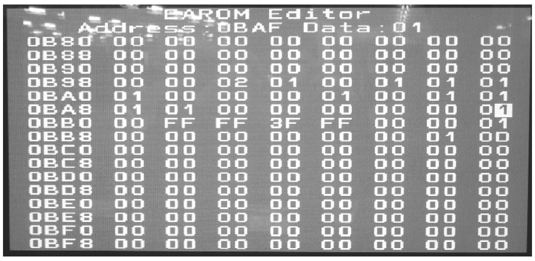
Restrict a function for hotels.

2. Access command

- **Enter to the Service 2 Mode.**
- **Press Information button on remote control and entry to the**

EAROM EDITOR Mode.

- **Press the RED/GREEN button to step up/down through the address.**
- **Press the YELLOW/BLUE button to step left/right through the address.**
- **Press the PROGRAMME UP/DOWN button to step up/down through the page.**
- **Press the VOLUME UP/DOWN button to change the function values.**
- **Set the data of EEPROM(ADDRESS 0BAF) to 01.**
- **Press the OK button to memorize the data.**



```
        EAROM Editor
    Address:0BAF Data:01
0B80  00  00  00  00  00  00  00  00
0B88  00  00  00  00  00  00  00  00
0B90  00  00  00  00  00  00  00  00
0B98  00  00  02  01  00  01  01  01
0BA0  01  00  00  00  01  00  01  01
0BA8  01  01  00  00  00  00  00  01
0BB0  00  FF  FF  3F  FF  00  00  01
0BB8  00  00  00  00  00  00  01  0D
0BC0  00  00  00  00  00  00  00  00
0BC8  00  00  00  00  00  00  00  00
0BD0  00  00  00  00  00  00  00  00
0BD8  00  00  00  00  00  00  00  00
0BE0  00  00  00  00  00  00  00  00
0BE8  00  00  00  00  00  00  00  00
0BF0  00  00  00  00  00  00  00  00
0BF8  00  00  00  00  00  00  00  00
```

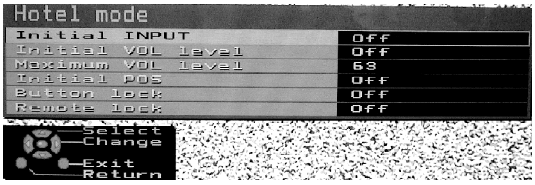
Push the Power switch(button) off/on the set(the remote control) to turn the set off/on.
It can be made Hotel mode.

3. Exit command

- **First, set the data of EEPROM(ADDRESS 0BAF) to 00.**
  Next, Push the Power switch(button) off/on the set(the remote control) to turn the set off/on.
  Then, it is no longer hotel mode.

4. Access command to the Hotel mode setup menu

- **Prerequisite : It is conditions that the data of EEPROM(ADDRESS 0BAF) is 01.**
  In order to display the Hotel mode setup menu, please enter the following command (within 2 second).
  [[TV]:down + [REMOTE]:TV/AV(3 times)]
  Then, the Hotel mode setup menu is displayed.



Hotel mode

Initial INPUT Off
Initial VOL level Off
Maximum VOL level 63
Initial POS Off
Button lock Off
Remote lock Off

5. Explain the Hotel mode setup menu

item	Function
Initial INPUT	**Select input signal modes.** **Set the input, when each time power is switched on.** **Selection :** **Off/TV/AV1/AV2/AV2S/AV3/Av3S/AV4/Av4S/Component/PC/HDMI1/HDMI2** **-Off: give priority to a last memory. However, Euro model is compulsorily set to TV.** **-AVnS/AVnC: only Euro model selectable** **-PC: selectable with VGA option**
Initial VOL level	**Adjust the volume when each time power is switched on.** **Selection/Range :** **Off/0 to 63** **-Off: give priority to a last memory**
Maximum VOL level	**Adjust maximum volume.** **Range :** **0 to 63**
Initial POS	**Select programme number.** **Selection :** **Off/0 to 99** **-Off: give priority to a last memory**
Button lock	**Select local key conditions.** **Selection :** **Off/SETUP/MENU/All** **-Off: altogether valid** **-SETUP: only F-key is invalid** **(Tuning guide(menu) can not be selected.)** **-MENU: only F-key is invalid** **(only Volume/Mute can be selected.)** **-All: altogether invalid.**
Remote lock	**Select remote control key conditions.** **Selection :** **Off/SETUP/MENU** **-Off: altogether valid** **-SETUP: only Setup menu is invalid** **-MENU: Picture/Sound/Setup menu are invalid**

6. To exit the Hotel mode
Disconnect AC power cord from wall outlet

13. Conductor Views

13.1. P-Board

13.2. PA-Board

13.3. H, HC and TA-Board

13.4. G-Board

13.5. GK, K and S-Board

13.6. DG-Board

13.7. D-Board

13.8. C1-Board

13.9. C2-Board

13.10. C3-Board

13.11. C4-Board

13.12. C5-Board

13.13. C6-Board

13.14. SC-Board

13.15. SU-Board

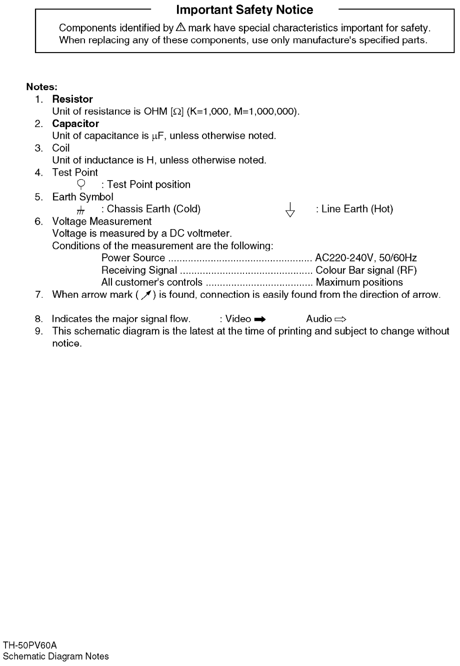
13.16. SD-Board

13.17. SS-Board

13.18. SS-Board

14. Block and Schematic Diagram

14.1. Schematic Diagram Note



Important Safety Notice

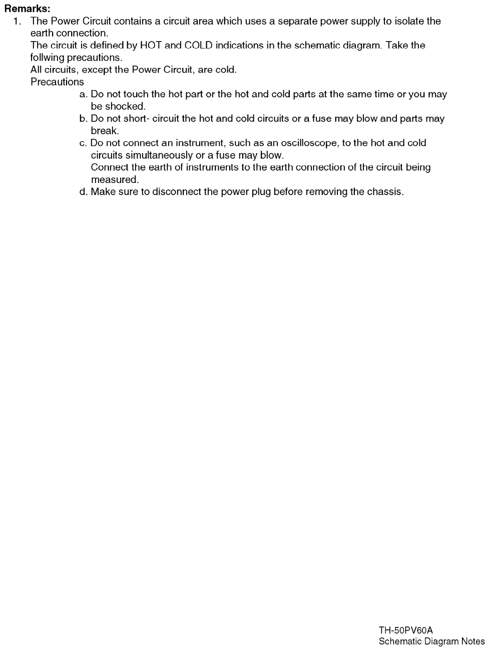
Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacture's specified parts.

Notes:

1. **Resistor**
   Unit of resistance is OHM [Ω] (K=1,000, M=1,000,000).
2. **Capacitor**
   Unit of capacitance is μF, unless otherwise noted.
3. Coil
   Unit of inductance is H, unless otherwise noted.
4. Test Point
   ⚲ : Test Point position
5. Earth Symbol
   ⏚ : Chassis Earth (Cold) ▽ : Line Earth (Hot)
6. Voltage Measurement
   Voltage is measured by a DC voltmeter.
   Conditions of the measurement are the following:
   Power Source AC220-240V, 50/60Hz
   Receiving Signal .... Colour Bar signal (RF)
   All customer's controls .... Maximum positions
7. When arrow mark (↗) is found, connection is easily found from the direction of arrow.

8. Indicates the major signal flow. : Video ➡ Audio ⇨
9. This schematic diagram is the latest at the time of printing and subject to change without notice.

TH-50PV60A
Schematic Diagram Notes



Remarks:

1. The Power Circuit contains a circuit area which uses a separate power supply to isolate the earth connection.
   The circuit is defined by HOT and COLD indications in the schematic diagram. Take the follwing precautions.
   All circuits, except the Power Circuit, are cold.
   Precautions
   a. Do not touch the hot part or the hot and cold parts at the same time or you may be shocked.
   b. Do not short- circuit the hot and cold circuits or a fuse may blow and parts may break.
   c. Do not connect an instrument, such as an oscilloscope, to the hot and cold circuits simultaneously or a fuse may blow.
   Connect the earth of instruments to the earth connection of the circuit being measured.
   d. Make sure to disconnect the power plug before removing the chassis.

TH-50PV60A
Schematic Diagram Notes

14.2. Main Block Diagram

14.3. P-Board Block Diagram

14.4. P-Board (1 of 2) Schematic Diagram

14.5. P-Board (2 of 2) Schematic Diagram

14.6. PA-Board Block Diagram

14.7. PA-Board (1 of 3) Schematic Diagram

14.8. PA-Board (2 of 3) Schematic Diagram

14.9. PA-Board (3 of 3) Schematic Diagram

14.10. H and TA-Board Block Diagram

14.11. H-Board (1 of 3) Schematic Diagram

14.12. H-Board (2 of 3) Schematic Diagram

14.13. H-Board (3 of 3) Schematic Diagram

14.14. G, GK, HC and K-Board Block Diagram

14.15. G, GK and K-Board Schematic Diagram

14.16. HC and TA-Board Schematic Diagram

14.17. DG-Board (1 of 3) Block Diagram

14.18. DG-Board (2 of 3) Block Diagram

14.19. DG-Board (3 of 3) Block Diagram

14.20. DG-Board (1 of 8) Schematic Diagram

14.21. DG-Board (2 of 8) Schematic Diagram

14.22. DG-Board (3 of 8) Schematic Diagram

14.23. DG-Board (4 of 8) Schematic Diagram

14.24. DG-Board (5 of 8) Schematic Diagram

14.25. DG-Board (6 of 8) Schematic Diagram

14.26. DG-Board (7 of 8) Schematic Diagram

14.27. DG-Board (8 of 8) Schematic Diagram

14.28. D-Board (1 of 2) Block Diagram

14.29. D-Board (2 of 2) Block Diagram

14.30. D-Board (1 of 8) Schematic Diagram

14.31. D-Board (2 of 8) Schematic Diagram

14.32. D-Board (3 of 8) Schematic Diagram

14.33. D-Board (4 of 8) Schematic Diagram

14.34. D-Board (5 of 8) Schematic Diagram

14.35. D-Board (6 of 8) Schematic Diagram

14.36. D-Board (7 of 8) Schematic Diagram

14.37. D-Board (8 of 8) Schematic Diagram

14.38. C1, C2, C5 and C6-Block Diagram

14.39. C3, C4, SS, SS2 and SS3-Board Block Diagram

14.40. C1-Board (1 of 2) Schematic Diagram

14.41. C1-Board (2 of 2) Schematic Diagram

14.42. C2-Board (1 of 3) Schematic Diagram

14.43. C2-Board (2 of 3) Schematic Diagram

14.44. C2-Board (3 of 3) Schematic Diagram

14.45. C3-Board (1 of 2) Schematic Diagram

14.46. C3-Board (2 of 2) Schematic Diagram

14.47. C4-Board (1 of 2) Schematic Diagram

14.48. C4-Board (2 of 2) Schematic Diagram

14.49. C5-Board (1 of 3) Schematic Diagram

14.50. C5-Board (2 of 3) Schematic Diagram

14.51. C5-Board (3 of 3) Schematic Diagram

14.52. C6-Board (1 of 2) Schematic Diagram

14.53. C6-Board (2 of 2) Schematic Diagram

14.54. SS, SS2 and SS3-Board Schematic Diagram

14.55. SC, SU and SD-Board Block Diagram

14.56. SC-Board (1 of 2) Schematic Diagram

14.57. SC-Board (2 of 2) Schematic Diagram

14.58. SU-Board (1 of 2) Schematic Diagram

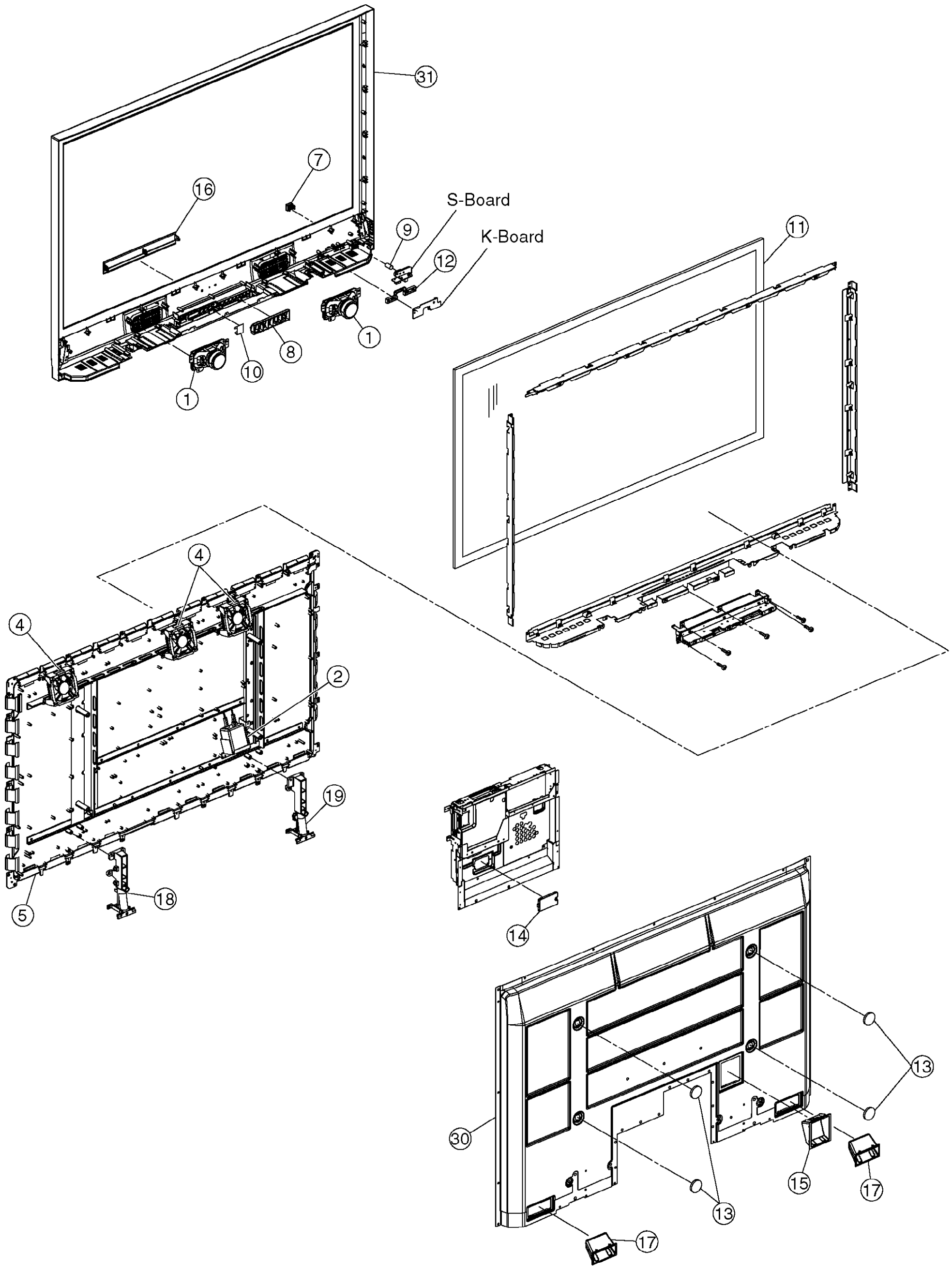
14.59. SU-Board (2 of 2) Schematic Diagram

14.60. SD-Board (1 of 2) Schematic Diagram

14.61. SD-Board (2 of 2) Schematic Diagram

15. Parts Location & Mechanical Replacement Parts List

15.1. Parts Location


㉛
⑦
⑯
S-Board
K-Board
⑨
⑪
⑫
①
⑧
⑩
①
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④
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㉚
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⑰
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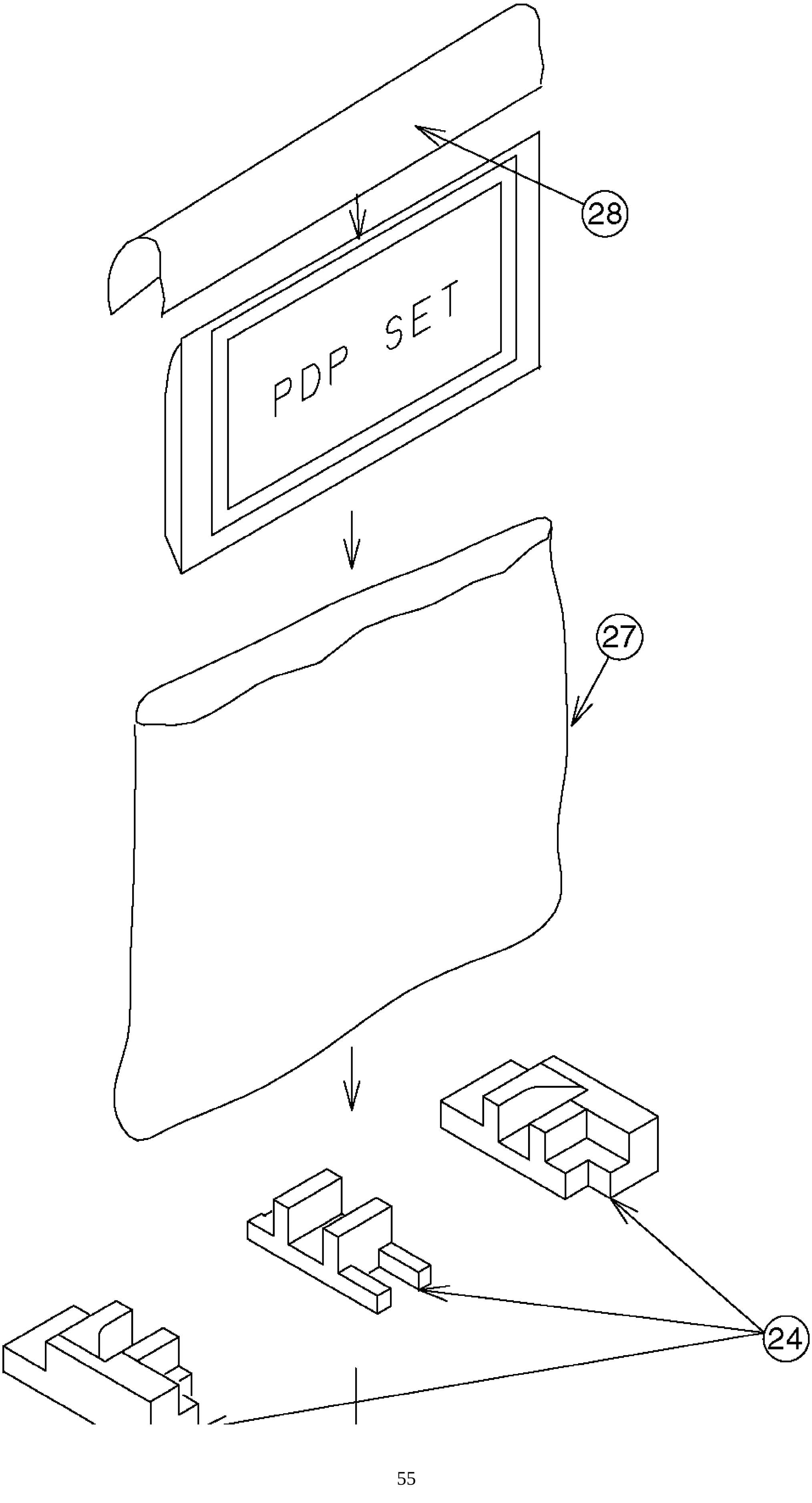
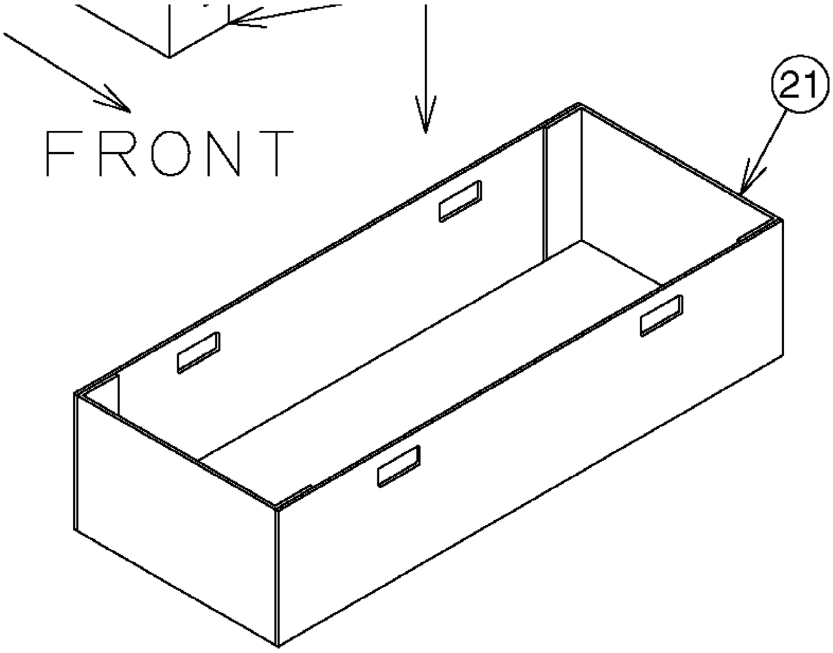
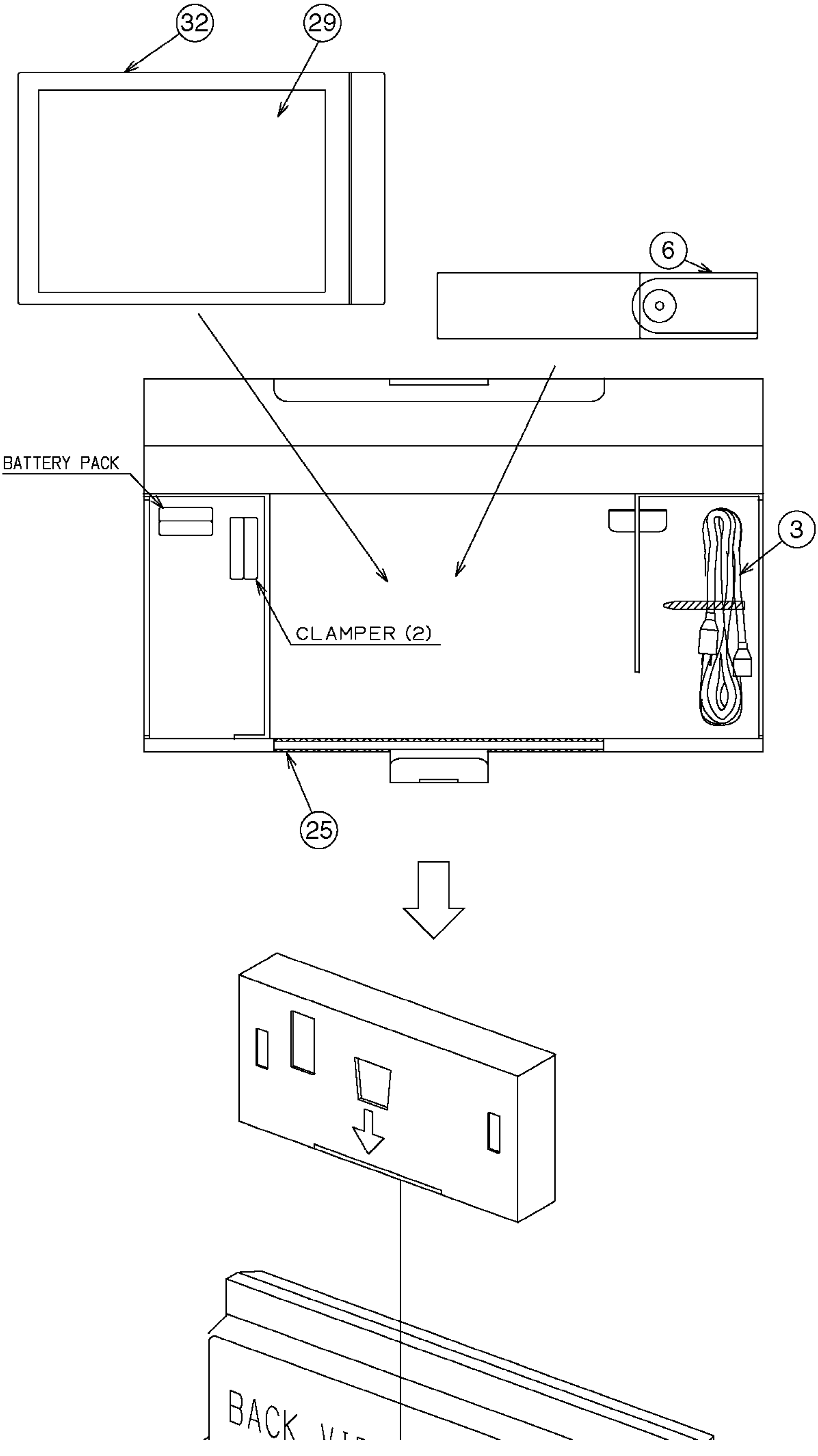
⑰

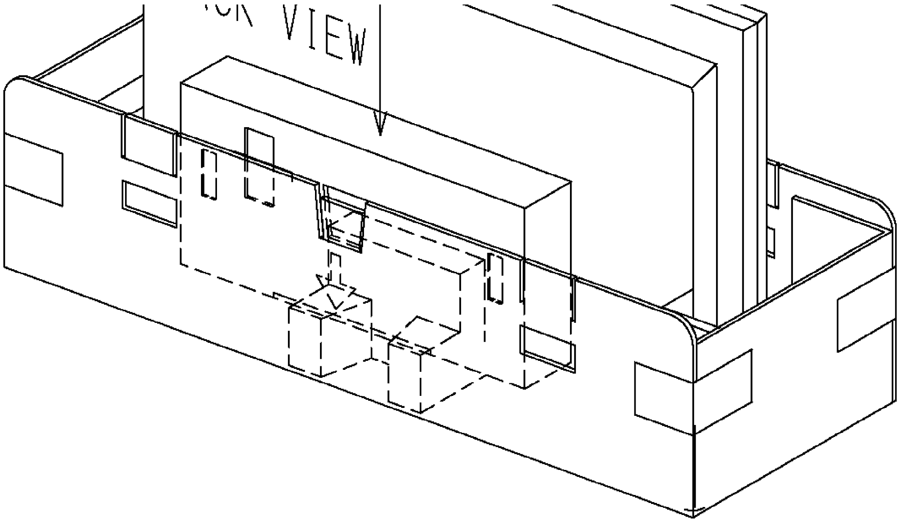
15.2. Packing Exploded Views (1)


PDP SET

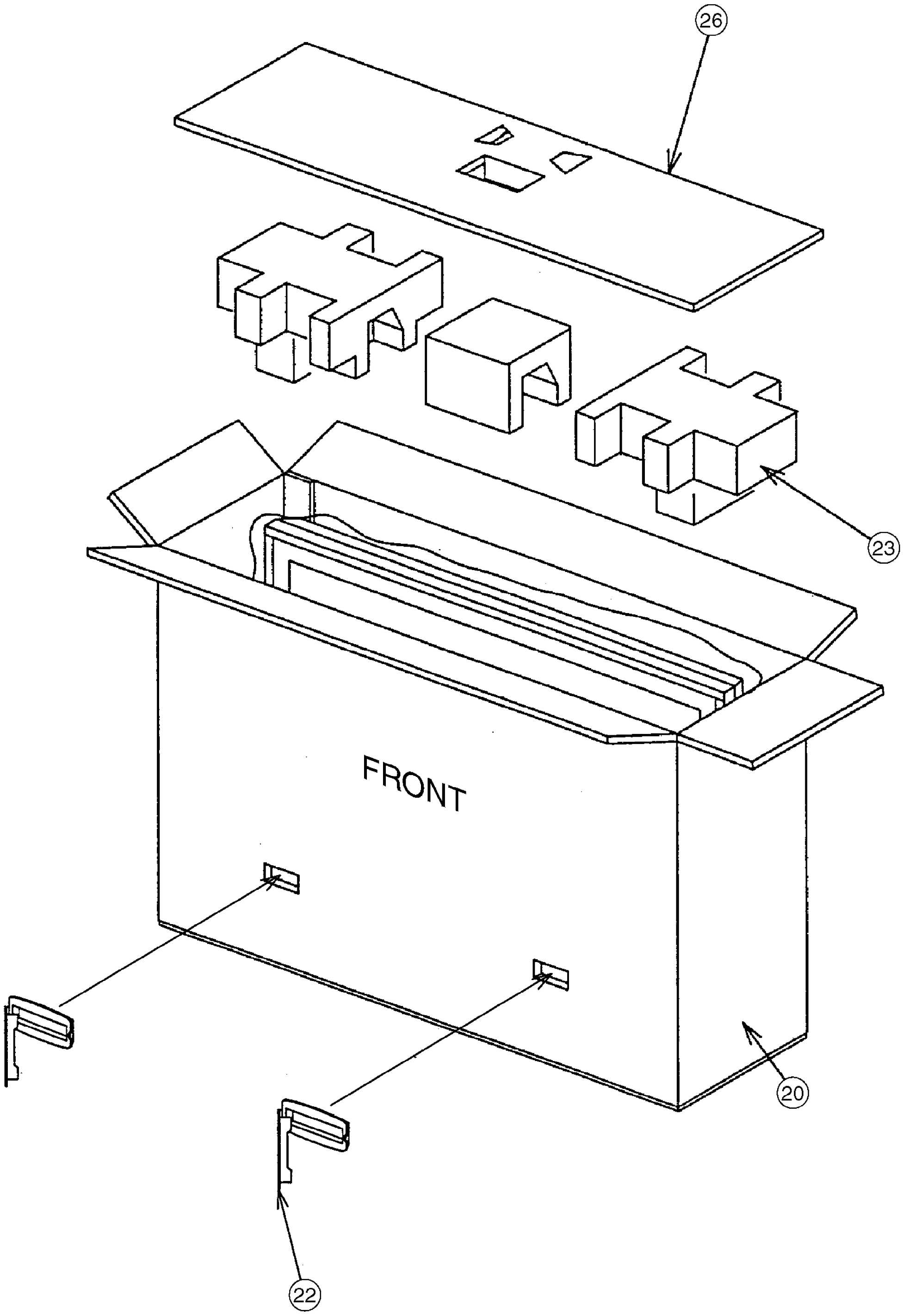


15.3. Packing Exploded Views (2)


BATTERY PACK
CLAMPER (2)
BACK



15.4. Packing Exploded Views



26
23
FRONT
20
22

15.5. Mechanical Replacement Parts List

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
1	EAS12S10A	SPEAKER	2	
	K1YD68000002	68P CONNECTOR	1	
	K1YD80000002	80P CONNECTOR	1	
2	K2AHYH000008	AC INLET	1	⚠
3	K2CK3DH00029	AC CORD	1	⚠
4	L6FALEFH0028	FAN	3	
5	MD50H09A1J	PLASMA DISPLAY PANEL	1	
6	N2QAJB000154	REMOTE CONTROL	1	
	TBMA186	PANASONIC BADGE	1	
7	TBXA48701	POWER BUTTON	1	
8	TBXA48801	CONTROL BUTTON	1	
9	TES4G204	SPRING	1	
10	TESA274	LEAF SPRING	1	
	THEL035N	SCREW	135	
	THEL0429	SCREW	28	
	THTD010N	SCREW	12	
	THTD011J	SCREW	2	
11	TKGA5278	FRONT GLASS	1	
12	TKKC5239	PANEL LIGHT	1	
13	TKKL5231	M8 SPACER CAP	4	
14	TKKL5269	COVER	1	
15	TKPA94301	INLET COVER	1	
16	TKPB01102	DOOR	1	
17	TKRA46201	REAR COVER HANDLE	2	
	TMKG661	SPONGE(TOP/BOTTOM)	2	
	TMKG662	SPONGE(LEFT/RIGHT)	2	
	TMKG670	FAN SPONGE	4	
	TMM14490	CLAMPER	2	
	TMM15481	CLAMPER	4	
	TMM17499	CLAMPER	1	
	TMM25401	CLAMPER	8	
	TMM7464-2	CLAMPER	2	
	TMM7468-1	CLAMPER	1	
	TMME047	CLAMPER	3	
	TMME061	CLAMPER	7	
	TMME190	CLAMPER	2	
	TMME226	CLAMPER	1	
	TMME258	CLAMPER	2	
	TMME260	CLAMPER	4	
	TMMJ068	RUBBER(FAN)	12	
	TMMX136	BC HOOK LEFT	1	
	TMMX137	BC HOOK RIGHT	1	
18	TMZX5066	STAND BRACKET RIGHT	1	
19	TMZX5067	STAND BRACKET LEFT	1	
20	TPCB94601	CARTON BOX TOP	1	
21	TPCB94701	CARTON BOX BOTTOM	1	
22	TPD169487	JOINT	4	
23	TPDA1270	CUSHION TOP	1	
24	TPDA1271	CUSHION BOTTOM	1	
25	TPDF0737	PAPER BOX	1	
26	TPDF1620	TOP PAD	1	
27	TPEH170	PROTECT COVER	1	
28	TPEH273	TOP-PROTECT SHEET	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
29	TQBC2089-1	INSTRUCTION BOOK(ENGLISH)	1	⚠
	TSXL514	CABLE(D32-C31)	1	
	TSXL515	CABLE(D33-C41)	1	
	TSXL516	CABLE(D31-C21)	1	
	TSXL517	CABLE(D34-C51)	1	
	TSXL518	CABLE(C10-C20/C50-C60)	2	
	TSXL519	CABLE (C12-C22)	2	
	TSXL520	CABLE(DG1-H1)	1	
	TSXL521	CABLE(DG15-HC15)	1	
	TSXL524	CABLE(DG3-D3)	1	
	TSXL525	CABLE(DG20-PA20)	1	
30	TTUA1373	REAR COVER	1	⚠
31	TXFKE01BHTA	ESCUTCHEON ASSY	1	⚠
	TXJ/SPBJTU	SPEAKER LEAD(RELAY-SP)	2	
	XTB4+12GFJ	SCREW	45	
	XTB4+12GFJK	SCREW	8	
	XTB4+16GFJ	SCREW	2	
	XTV3+10JFJK	SCREW	4	
	XTW3+10TFJ	SCREW	3	
	XYN3+F10FJ	SCREW	1	
	XYN3+F6FJ	SCREW	1	
	XYN3+F8FJ	SCREW	38	
	XYN3+J12FJ	SCREW	40	
	XYN3+J8FJ	SCREW ROHS	18	
	XYN4+E8FJ	SCREW	1	
	XYN4+F10FJK	SCREW	5	
	XYN4+F30FJK	SCREW	6	
	XYN5+C15FJ	SCREW	8	
32	XZBT6506	POLY BAG	1	

16. Electrical Replacement Parts List

16.1. Replacement Parts List Notes

Important Safety Notice

Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

RTL (Retention Time Limited)

Note: The marking (RTL) indicates that the Retention Time is Limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependant on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

Abbreviation of part name and description

1. Resistor

Example:

ERD25TJ104 C 100KOHM, J, 1/4W
Type Allowance

Type	Allowance
C : Carbon	F : ±1%
F : Fuse	G : ±2%
M : Metal Oxide	J : ±5%
Metal FIlm	K : ±10%
S : Solid	M : ±20%
W : Wire Wound	

2. Capacitor

Example:

ECKF1H103ZF C 0.01UF, Z, 50V
Type Allowance

Type	Allowance
C : Ceramic	C : ±0.25pF
E : Electrolytic	D : ±0.5pF
P : Polyester	F : ±1pF
Polyprop	G : ±3pF
lene	J : ±5pF
T : Tantalum	K : ±10pF
	L : ±15pF
	M : ±20pF
	P : +100%, -0%
	Z : +80%, -20%

16.2. Electrical Replacement Parts List

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
F101.102	K5D103BMA001	TIME LAG FUSE HIGH	2	⚠
C002	ECA1HM100	E 10UF, 50V	1	
C003	ECJ1VF1H104Z	C 0.1UF, Z, 50V	1	
C006	ECA0JM102	E 1000UF, 6.3V	1	
C008	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C009	ECJ1XC1H101J	C 100PF, J, 50V	1	
C010	ECJ1VC1H330J	C 33PF, J, 50V	1	
C10	K1MN55BA0076	55P CONNECTOR	1	
C011	ECJ1VC1H330J	C 33PF, J, 50V	1	
C016	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C20	K1MN55BA0076	55P CONNECTOR	1	
C21	K1MN80BA0076	80P CONNECTOR	1	
C22	K1MN20BA0231	20P CONNECTOR	1	
C029,30	ECJ1VC1H330J	C 33PF, J, 50V	2	
C31	K1MN55BA0076	55P CONNECTOR	1	
C32	K1MN20BA0231	20P CONNECTOR	1	
C33	K1KA04AA0150	4P CONNECTOR	1	
C041	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C41	K1MN68BA0076	68P CONNECTOR	1	
C042	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C42	K1MN20BA0231	20P CONNECTOR	1	
C43	K1KA12BA0107	12P CONNECTOR	1	
C44	K1KA04BA0107	4P CONNECTOR	1	
C50	K1MN55BA0076	55P CONNECTOR	1	
C51	K1MN80BA0076	80P CONNECTOR	1	
C52	K1MN20BA0231	20P CONNECTOR	1	
C60	K1MN55BA0076	55P CONNECTOR	1	
C1100	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C1102	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C1103	ECJ0EB1E271K	C 270PF, K, 25V	1	
C1105	ECJ0EB1E271K	C 270PF, K, 25V	1	
C1106	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C1107	EEEHB0G101R	C 100PF, J, 4V	1	
C1109-11	ECJ0EB1A104K	C 0.1UF, K, 10V	3	
C1112	ECJ0EB1E271K	C 270PF, K, 25V	1	
C1114	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C1116	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C1118-23	ECJ0EB1A104K	C 0.1UF, K, 10V	6	
C1125	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C1127-32	ECJ0EB1A104K	C 0.1UF, K, 10V	6	
C1133,34	ECJ1XC1H150J	C 15PF, J, 50V	2	
C1135-42	ECJ0EB1A104K	C 0.1UF, K, 10V	8	
C1144-50	ECJ0EB1A104K	C 0.1UF, K, 10V	7	
C1152	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C1153	EEEHB0G101R	C 100PF, J, 4V	1	
C1154	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C1155	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C1156,57	ECJ1XC1H220J	C 22PF, J, 50V	2	
C1158	F1J0J1060004	C 0.010UF, K, 16V	1	
C1159	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C1160	EEEHB1C470P	C 47PF, J, 16V	1	
C1161	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C1162	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C1167,68	ECJ1VB1A105K	C 0.01UF, Z, 50V	2	
C1172	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C1177	ECJ1VB1A334K	C 0.1UF, K, 16V	1	
C1178	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C1190	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C1209	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C1212	ECJ1XC1H151J	C 150PF, J, 50V	1	
C1219,20	EEEHP1C100R	C 10PF, J, 16V	2	
C1221	ECJ0EB1H102K	C 1000PF, K, 50V	1	
C1222,23	F1J0J1060004	C 0.010UF, K, 16V	2	
C1226	F1J0J1060004	C 0.010UF, K, 16V	1	
C1227	ECJ0EB1H101K	C 100PF, K, 50V	1	
C1228-34	EEEHB1C470P	C 47PF, J, 16V	7	
C1294	ECJ1XC1H330J	C 33PF, J, 50V	1	
C2005,06	ECJ1XC1H561J	C 560PF, J, 50V	2	
C2010,11	ECJ1XC1H561J	C 560PF, J, 50V	2	
C2013,14	ECJ1XC1H561J	C 560PF, J, 50V	2	
C2016,17	ECJ1XC1H561J	C 560PF, J, 50V	2	
C2019	ECA1CM221	E 220UF, 16V	1	
C2020	ECA1HM220	E 22UF, 50V	1	
C2021,22	ECJ1XC1H561J	C 560PF, J, 50V	2	
C2111	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C2116	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C2118,19	ECEA1CN470U	E 47UF, 16V	2	
C2125,26	ECJ1VB1H102K	C 1000PF, K, 50V	2	
C2127	ECA1CMH101	E 100UF, 16V	1	
C2128	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C2129,30	F1J1A1050002	C 1UF, Z, 50V	2	
C2131	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C2132	EEEHB1C100R	C 10PF, J, 16V	1	
C2133,34	ECJ1XC1H470J	C 47PF, J, 50V	2	
C2139-43	ECJ1VB1H103K	C 0.001UF, K, 50V	5	
C2146	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C2147	ECA1HM220	E 22UF, 50V	1	
C2148-50	ECJ2FB1C105K	C 1UF, K, 16V	3	
C2152	ECJ2FB1C105K	C 1UF, K, 16V	1	
C2153	ECJ2FF1C475Z	C 0.047UF, Z, 16V	1	
C2154	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C2155	ECJ2FB1C105K	C 1UF, K, 16V	1	
C2157	ECJ2FB1C105K	C 1UF, K, 16V	1	
C2159,60	ECJ2FB1C105K	C 1UF, K, 16V	2	
C2161	ECA1CMH101	E 100UF, 16V	1	
C2162-65	ECJ2FB1C105K	C 1UF, K, 16V	4	
C2168,69	ECJ2FB1C105K	C 1UF, K, 16V	2	
C2170-72	ECJ1VB1H102K	C 1000PF, K, 50V	3	
C2173	ECJ1VB1H103K	C 0.001UF, K, 50V	1	
C2174	ECJ1VB1H102K	C 1000PF, K, 50V	1	
C2175-77	ECJ1VB1H103K	C 0.001UF, K, 50V	3	
C2178,79	EEEHB1C100R	C 10PF, J, 16V	2	
C2181	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C2183	EEEHB1H3R3R	C 3.3PF, J, 50V	1	
C2184,85	ECJ2VF1C104Z	C 0.1UF, Z, 16V	2	
C2189,90	ECJ2FB1C105K	C 1UF, K, 16V	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C2191	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C2192	EEEHB1C100R	C 10PF, J, 16V	1	
C2195	ECJ1XC1H470J	C 47PF, J, 50V	1	
C2196	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C2197	ECJ2FB0J225K	C 2.2UF, Z, 16V	1	
C2198	EEEHB0J101P	C 100PF, J, 6.3V	1	
C2199	ECJ1VC1H560J	C 56PF, J, 50V	1	
C2200	ECJ1XC1H470J	C 47PF, J, 50V	1	
C2201	ECJ1XC1H030C	C 3PF, C, 50V	1	
C2202	ECJ1XC1H050C	C 5PF, C, 50V	1	
C2203	ECJ1VC1H100C	C 10PF, C, 50V	1	
C2204	ECJ1XC1H220J	C 22PF, J, 50V	1	
C2211	ECJ1VB1C104K	C 0.1UF, K, 16V	1	
C2213	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
C2217	F1H0J1050012	C 1UF, K, 16V	1	
C2222	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C2223	ECJ1XC1H390J	C 39PF, J, 50V	1	
C2225	ECJ2FB1C105K	C 1UF, K, 16V	1	
C2226	ECJ1VB1H102K	C 1000PF, K, 50V	1	
C2227	ECA1CMH101	E 100UF, 16V	1	
C2228	ECJ1VB1H103K	C 0.001UF, K, 50V	1	
C2229,30	ECA1CMH101	E 100UF, 16V	2	
C2231	ECA1CHG470	E 47UF, 16V	1	
C2232	F1H0J1050012	C 1UF, K, 16V	1	
C2233,34	ECJ1VB1H102K	C 1000PF, K, 50V	2	
C2235	F1H0J1050012	C 1UF, K, 16V	1	
C2236	ECA1CHG470	E 47UF, 16V	1	
C2237-40	ECJ1VB1H103K	C 0.001UF, K, 50V	4	
C2301	ECA1EHG471	E 470UF, 25V	1	
C2303	ECA1CMH101	E 100UF, 16V	1	
C2307	ECA1CMH101	E 100UF, 16V	1	
C2314	ECJ1VB1C105K	C 0.01UF, K, 16V	1	
C2317	ECJ2FB1A105K	C 1UF, K, 10V	1	
C2320	ECJ2FB1A105K	C 1UF, K, 10V	1	
C2321	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C2322	ECJ2FB1A105K	C 1UF, K, 10V	1	
C2323,24	ECJ2FB1E224K	C 22UF, K, 25V	2	
C2325,26	ECJ1VB1E104K	C 0.10UF, K, 25V	2	
C2327	F1J1H474A757	C 0.47UF, 50V	1	
C2328-31	ECJ2FB1E105K	C 1UF, K, 25V	4	
C2332,33	ECA1EHG471	E 470UF, 25V	2	
C2334,35	ECJ1VB1E104K	C 0.10UF, K, 25V	2	
C2336	F1J1H474A757	C 0.47UF, 50V	1	
C2337,38	ECJ2FB1E224K	C 22UF, K, 25V	2	
C2341	ECJ3YB1E106M	C 10 UF, K, 25V	1	
C2342	ECJ2FB1E105K	C 1UF, K, 25V	1	
C2372	ECA1HHG100	E 10UF, 50V	1	
C2373	ECJ1VF1H104Z	C 0.1UF, Z, 50V	1	
C2374	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C2380	ECJ1VB1H103K	C 0.001UF, K, 50V	1	
C2382	ECJ1VB1C105K	C 0.01UF, K, 16V	1	
C2385	ECJ2FB1A105K	C 1UF, K, 10V	1	
C2387	ECJ2FB1A105K	C 1UF, K, 10V	1	
C2393,94	ECJ1VB1C105K	C 0.01UF, K, 16V	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C2401	ECJ2FB1A105K	C 1UF, K, 10V	1	
C2402	ECJ2FB0J106M	C 10UF, Z,6.3V	1	
C2403	ECJ1VB1H103K	C 0.001UF, K, 50V	1	
C2417	ECJ2FB0J106M	C 10UF, Z,6.3V	1	
C2430	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C2510,11	ECJ2VF1C105Z	C 1UF, Z, 16V	2	
C2512	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C2515	ECJ1VB1H103K	C 0.001UF, K, 50V	1	
C2521	ECJ1VB1H103K	C 0.001UF, K, 50V	1	
C3005	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C3021-25	F1J1A1050002	C 1UF, Z, 50V	5	
C3026	ECJ1VB1H103K	C 0.001UF, K, 50V	1	
C3027,28	F1J1A1050002	C 1UF, Z, 50V	2	
C3029	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C3030	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C3031	F1J1A1050002	C 1UF, Z, 50V	1	
C3033	F1J1A1050002	C 1UF, Z, 50V	1	
C3035	F1J1A1050002	C 1UF, Z, 50V	1	
C3036	ECJ1VB1H103K	C 0.001UF, K, 50V	1	
C3038	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C3039	ECJ1VB1H103K	C 0.001UF, K, 50V	1	
C3040	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C3041	ECJ1VB1H103K	C 0.001UF, K, 50V	1	
C3043	F1J1A1050002	C 1UF, Z, 50V	1	
C3045	F1J1A1050002	C 1UF, Z, 50V	1	
C3046	ECJ1VB1H103K	C 0.001UF, K, 50V	1	
C3047	F1J1A1050002	C 1UF, Z, 50V	1	
C3048	ECJ1VB1H103K	C 0.001UF, K, 50V	1	
C3049,50	F1J1A1050002	C 1UF, Z, 50V	2	
C3051-53	ECJ1VB1H103K	C 0.001UF, K, 50V	3	
C3054-56	F1J1A1050002	C 1UF, Z, 50V	3	
C3058	ECA1EM471	E 470UF, 25V	1	
C3059,60	ECJ2VF1C105Z	C 1UF, Z, 16V	2	
C3062-64	ECJ2VF1C104Z	C 0.1UF, Z, 16V	3	
C3065	ECJ1VB1H103K	C 0.001UF, K, 50V	1	
C3067	ECJ1VB1H103K	C 0.001UF, K, 50V	1	
C3069	ECA1EM471	E 470UF, 25V	1	
C3070	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C3075	ECA1CM221	E 220UF, 16V	1	
C3207	ECJ2FB1C105K	C 1UF, K, 16V	1	
C3208	ECJ2FB1C474K	C 0.47UF, Z, 16V	1	
C3214	ECJ2FF1A106Z	C 0.001UF, Z, 10V	1	
C3216	ECJ2FF1A106Z	C 0.001UF, Z, 10V	1	
C3226-28	ECJ2FF1A106Z	C 0.001UF, Z, 10V	3	
C3230	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C3233	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C3241	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C3248	ECJ2FB1C105K	C 1UF, K, 16V	1	
C3249	ECJ2FB1C474K	C 0.47UF, Z, 16V	1	
C3251	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C3252	ECJ2FB1C105K	C 1UF, K, 16V	1	
C3253,54	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C3256	ECJ2FB1C105K	C 1UF, K, 16V	1	
C3257	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C3262	ECJ1VB1H472K	C 4700PF, K, 50V	1	
C3268	ECJ1VB1H103K	C 0.001UF, K, 50V	1	
C3305	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C3330	ECA1CM470	E 47UF, 16V	1	
C3331	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C3332	ECJ2VF1C104Z	C 0.1UF, Z, 16V	1	
C3334	ECEA1CN470U	E 47UF, 16V	1	
C3335	ECJ2VB1C104K	C 0.1UF, K, 16V	1	
C3336	ECEA1CN470U	E 47UF, 16V	1	
C3337	ECJ2VB1C104K	C 0.1UF, K, 16V	1	
C3338	ECEA1CN470U	E 47UF, 16V	1	
C3339	ECJ2VB1C104K	C 0.1UF, K, 16V	1	
C3340-42	ECJ2VF1C104Z	C 0.1UF, Z, 16V	3	
C3701	ECJ2XC1H561K	C 560PF, K, 50V	1	
C3703	ECJ2XC1H561K	C 560PF, K, 50V	1	
C3711,12	ECJ2VF1H333Z	C 0.033UF, Z, 50V	2	
C3750,51	ECJ2XC1H102K	C 1000PF, K, 50V	2	
C4003-08	F1J0J1060004	C 0.010UF, K, 16V	6	
C4014,15	F1J0J1060004	C 0.010UF, K, 16V	2	
C4023	F1J0J1060004	C 0.010UF, K, 16V	1	
C4026	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4027	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4028	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C4112	F1J0J1060004	C 0.010UF, K, 16V	1	
C4117	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4158	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4159	F1H1C104A065	C 0.1UF, K, 16V	1	
C4160	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4165	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4168	ECJ1XC1H680J	C 68PF, J, 50V	1	
C4171	ECJ1XC1H471J	C 470PF, J, 50V	1	
C4172,73	F1H1C104A065	C 0.1UF, K, 16V	2	
C4174	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4175	F1H1C104A065	C 0.1UF, K, 16V	1	
C4176	ECJ1VB0J225K	C 2.2UF, K, 6.3V	1	
C4177	ECJ2FB1C684K	C 68UF, Z, 16V	1	
C4178	ECJ1XB1C393K	C 0.039UF, K, 16V	1	
C4180	F1H1C104A065	C 0.1UF, K, 16V	1	
C4185,86	ECJ3XB0J106M	C 10UF, M,6.3V	2	
C4188	F1J0J1060004	C 0.010UF, K, 16V	1	
C4189-91	ECJ0EB1A104K	C 0.1UF, K, 10V	3	
C4193	ECJ0EB1H102K	C 1000PF, K, 50V	1	
C4194-97	F1H1C104A065	C 0.1UF, K, 16V	4	
C4199	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C4200	EEEHB1C470P	C 47PF, J, 16V	1	
C4201	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C4204	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4205,06	F1H1C104A065	C 0.1UF, K, 16V	2	
C4208,09	ECJ0EB1A104K	C 0.1UF, K, 10V	2	
C4211	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4215	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4216	EEEHB1C470P	C 47PF, J, 16V	1	
C4217	F1H1C104A065	C 0.1UF, K, 16V	1	
C4218	ECJ0EB1H102K	C 1000PF, K, 50V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4219	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4224	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4227	ECJ1VB1C823K	C 0.082UF, K, 16V	1	
C4228	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C4235	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C4244	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4245	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4248	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4253	EEEHB1C470P	C 47PF, J, 16V	1	
C4256	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4262-64	ECJ0EB1A104K	C 0.1UF, K, 10V	3	
C4266	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C4269	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4272	EEEHB1C470P	C 47PF, J, 16V	1	
C4273	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4281-84	ECJ0EB1A104K	C 0.1UF, K, 10V	4	
C4287,88	ECJ0EB1A104K	C 0.1UF, K, 10V	2	
C4289,90	EEEHB0J330R	C 33PF, J, 6.3V	2	
C4291,92	ECJ0EB1A104K	C 0.1UF, K, 10V	2	
C4296	F1J0J1060004	C 0.010UF, K, 16V	1	
C4297	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4298-06	ECJ1VB1A105K	C 0.01UF, Z, 50V	9	
C4307-09	ECJ0EB1A104K	C 0.1UF, K, 10V	3	
C4310	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C4311	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4312	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C4313,14	ECJ0EB1A104K	C 0.1UF, K, 10V	2	
C4315	F1J0J1060004	C 0.010UF, K, 16V	1	
C4316-18	ECJ0EB1A104K	C 0.1UF, K, 10V	3	
C4320-22	ECJ0EB1A104K	C 0.1UF, K, 10V	3	
C4325	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4327	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4329,30	ECJ0EB1A104K	C 0.1UF, K, 10V	2	
C4331	F1J0J1060004	C 0.010UF, K, 16V	1	
C4332	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4333-38	ECJ0EB1A104K	C 0.1UF, K, 10V	6	
C4339	ECJ1VB0J225K	C 2.2UF, K, 6.3V	1	
C4340	ECJ1XC1H471J	C 470PF, J, 50V	1	
C4341	EEEHB1C470P	C 47PF, J, 16V	1	
C4342	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4343	EEEHB1C100R	C 10PF, J, 16V	1	
C4344,45	F1J0J1060004	C 0.010UF, K, 16V	2	
C4346	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4347	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4348	EEEHB1C470P	C 47PF, J, 16V	1	
C4349	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C4350,51	ECJ1XC1H181J	C 180PF, J, 50V	2	
C4352,53	ECJ1XC1H330J	C 33PF, J, 50V	2	
C4354	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C4360	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4362	F1J0J1060004	C 0.010UF, K, 16V	1	
C4363,64	ECJ0EB1A104K	C 0.1UF, K, 10V	2	
C4365	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4366	EEEHB1C470P	C 47PF, J, 16V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4367	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4371	ECJ0EB1H102K	C 1000PF, K, 50V	1	
C4372	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4373	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4374	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4375,76	ECJ0EB1H102K	C 1000PF, K, 50V	2	
C4377	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4379	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4380	ECJ0EB1H102K	C 1000PF, K, 50V	1	
C4381,82	ECJ0EB1A104K	C 0.1UF, K, 10V	2	
C4383	ECJ0EB1H102K	C 1000PF, K, 50V	1	
C4384	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4385	ECJ0EB1H102K	C 1000PF, K, 50V	1	
C4386	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4387	ECJ0EB1H102K	C 1000PF, K, 50V	1	
C4388	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4389	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4390	ECJ0EB1H102K	C 1000PF, K, 50V	1	
C4391	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4392	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4393,94	ECJ0EB1H102K	C 1000PF, K, 50V	2	
C4395	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4396	ECJ0EB1H102K	C 1000PF, K, 50V	1	
C4397,98	ECJ0EB1A104K	C 0.1UF, K, 10V	2	
C4399,00	ECJ1VB1A105K	C 0.01UF, Z, 50V	2	
C4401	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4402,03	ECJ0EB1H102K	C 1000PF, K, 50V	2	
C4404	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4405	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4406	ECJ0EB1H102K	C 1000PF, K, 50V	1	
C4407,08	ECJ0EB1A104K	C 0.1UF, K, 10V	2	
C4409	ECJ0EB1H102K	C 1000PF, K, 50V	1	
C4410	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4411,12	ECJ0EB1A104K	C 0.1UF, K, 10V	2	
C4413,14	ECJ0EB1H102K	C 1000PF, K, 50V	2	
C4415	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4417	EEEHB1C470P	C 47PF, J, 16V	1	
C4418,19	ECJ1VB1A105K	C 0.01UF, Z, 50V	2	
C4420,21	ECJ0EB1A104K	C 0.1UF, K, 10V	2	
C4422-24	ECJ0EB1H102K	C 1000PF, K, 50V	3	
C4425,26	ECJ0EB1A104K	C 0.1UF, K, 10V	2	
C4427	ECJ0EB1H102K	C 1000PF, K, 50V	1	
C4428	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4429,30	ECJ0EB1H102K	C 1000PF, K, 50V	2	
C4434	ECJ0EB1H102K	C 1000PF, K, 50V	1	
C4435	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4436-39	ECJ0EB1H102K	C 1000PF, K, 50V	4	
C4440	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4441,42	ECJ0EB1H102K	C 1000PF, K, 50V	2	
C4447	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4448	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C4451	ECJ0EB1H102K	C 1000PF, K, 50V	1	
C4452	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4453,54	ECJ0EB1H102K	C 1000PF, K, 50V	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4455	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4456	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4457,58	ECJ0EB1H102K	C 1000PF, K, 50V	2	
C4459	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4460	ECJ0EB1H102K	C 1000PF, K, 50V	1	
C4462	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4464	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4465	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4466	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C4467	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4470	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4474	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4475,76	ECJ0EB1H102K	C 1000PF, K, 50V	2	
C4477	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4478	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4479-81	ECJ0EB1H102K	C 1000PF, K, 50V	3	
C4482	ECJ1XC1H180J	C 18PF, J, 50V	1	
C4483	ECJ1XC1H150J	C 15PF, J, 50V	1	
C4493	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4494	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4496	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4497	EEEHB0G101R	C 100PF, J, 4V	1	
C4498	ECJ1XC1H471J	C 470PF, J, 50V	1	
C4499	EEFCD0G560ER	56UF,	1	
C4501	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4502	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C4503	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4504	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C4505	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4506	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C4507	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4508	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C4509-11	ECJ0EB1A104K	C 0.1UF, K, 10V	3	
C4512	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C4513	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4514	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C4515,16	ECJ0EB1A104K	C 0.1UF, K, 10V	2	
C4517	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C4518	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4519	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C4520	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4521	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C4522	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4523	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C4524	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4525	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C4526	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4527	ECJ0EB1C103K	C0.010UF, K, 16V	1	
C4528	EEEHB1C470P	C 47PF, J, 16V	1	
C4529	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4530,31	ECJ0EB1H102K	C 1000PF, K, 50V	2	
C4532,33	ECJ0EB1A104K	C 0.1UF, K, 10V	2	
C4534	ECJ0EB1H102K	C 1000PF, K, 50V	1	
C4535	ECJ0EB1A104K	C 0.1UF, K, 10V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4536	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4537	EEEHB0G101R	C 100PF, J, 4V	1	
C4538	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4539	ECJ1VB1A105K	C 0.01UF, Z, 50V	1	
C4540	ECJ0EB1H102K	C 1000PF, K, 50V	1	
C4541	ECJ0EB1A104K	C 0.1UF, K, 10V	1	
C4543	F1H1C104A065	C 0.1UF, K, 16V	1	
C4544	ECJ1VB1C105K	C 0.01UF, K, 16V	1	
C5604	ECA1HHG100	E 10UF, 50V	1	
C5605	EEUFC1E471	E 470UF, 25V	1	
C5606	ECA1CM471	E 470UF, 16V	1	
C5609	ECA1HM220	E 22UF, 50V	1	
C5611	F2A1H331A257	E 330UF, 50V	1	
C5612	ECA1CM471	E 470UF, 16V	1	
C5613	ECJ1VB1E104K	C 0.10UF, K, 25V	1	
C5616	ECJ1VB1E104K	C 0.10UF, K, 25V	1	
C5617	ECA1CM471	E 470UF, 16V	1	
C5618,19	ECJ1VB1E104K	C 0.10UF, K, 25V	2	
C5622	ECA1CM471	E 470UF, 16V	1	
C5623	ECJ1VB1E104K	C 0.10UF, K, 25V	1	
C5626	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C5633	ECA1EM221	E 220UF, 25V	1	
C5637	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C5641-44	ECJ1XF1C104Z	C 0.1UF, Z, 16V	4	
C5645	ECA1CHG470	E 47UF, 16V	1	
C5646	ECJ1VB1H103K	C 0.001UF, K, 50V	1	
C5647	ECA1CHG470	E 47UF, 16V	1	
C5648	ECJ1VB1H103K	C 0.001UF, K, 50V	1	
C5670	ECJ1VB1E104K	C 0.10UF, K, 25V	1	
C5672	ECA1HM220	E 22UF, 50V	1	
C5673	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C5685	ECA1HHG100	E 10UF, 50V	1	
C5686	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C5801,02	EEUFC1E471	E 470UF, 25V	2	
C5804	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C5805	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C5809	ECJ3XF1E105Z	C 1UF, Z, 25V	1	
C5810	ECA1EHG470	E 47UF, 25V	1	
C6001	F1L2J562A022	C 5600UF, K,6.3V	1	
C6011-16	F2A2T201A001	E 200UF,	6	
C6023	F1L2J562A022	C 5600UF, K,6.3V	1	
C6031	F0C2E405A176	E 0.040UF, 250V	1	
C6041-44	TCUY1C105ZFN	C 1UF, 16V	4	
C6105	F1L1E4750004	C 4.7UF, 25V	1	
C6111,12	F2A2D221A022	E 220UF, 200V	2	
C6132	F1L1E4750004	C 4.7UF, 25V	1	
C6134,35	F1L1E4750004	C 4.7UF, 25V	2	
C6151	ECJ3YB1E105K	C 1UF, K, 25V	1	
C6152-55	F1L1E4750004	C 4.7UF, 25V	4	
C6192	ECJ3YB1E105K	C 1UF, K, 25V	1	
C6194,95	F1L1E4750004	C 4.7UF, 25V	2	
C6201-04	F0C2E405A176	E 0.040UF, 250V	4	
C6211,12	F1L1E4750004	C 4.7UF, 25V	2	
C6213	F2A1E102A220	E 1000UF, 25V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C6221	ECJ2XB1H104K	C 0.1UF, K, 50V	1	
C6241	F2A1A1010074	E 100UF, 10V	1	
C6242	TCUY1C105ZFN	C 1UF, 16V	1	
C6243	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C6251	TCUY1C105ZFN	C 1UF, 16V	1	
C6262,63	F2A2A471A072	E 470UF, 100V	2	
C6272,73	EEUFC1E221	E 220UF, 25V	2	
C6401-03	F1L2J222A022	C 2200UF, K,6.3V	3	
C6411-16	F2A2T201A001	E 200UF,	6	
C6421-24	F1L2J222A022	C 2200UF, K,6.3V	4	
C6431	F0C2E405A176	E 0.040UF, 250V	1	
C6472	ECJ2XB1H104K	C 0.1UF, K, 50V	1	
C6480	ECJ2XB1H104K	C 0.1UF, K, 50V	1	
C6502	F1L1E4750004	C 4.7UF, 25V	1	
C6504,05	F1L1E4750004	C 4.7UF, 25V	2	
C6512-15	F0C2E405A176	E 0.040UF, 250V	4	
C6521	ECJ3YB1E105K	C 1UF, K, 25V	1	
C6522	F1L1E4750004	C 4.7UF, 25V	1	
C6524,25	F1L1E4750004	C 4.7UF, 25V	2	
C6527	F1L1E4750004	C 4.7UF, 25V	1	
C6561	F2A1A1010074	E 100UF, 10V	1	
C6562	TCUY1C105ZFN	C 1UF, 16V	1	
C6563	F2A1A1010074	E 100UF, 10V	1	
C6564	TCUY1C105ZFN	C 1UF, 16V	1	
C6565,66	ECJ2XB1H103K	C 0.01UF, K, 50V	2	
C6581	ECJ3YB1E105K	C 1UF, K, 25V	1	
C6582	TCUY1C105ZFN	C 1UF, 16V	1	
C6592	ECA1EM471	E 470UF, 25V	1	
C6593	ECJ2XC1H102J	C 1000PF, J, 50V	1	
C6601,02	F1L1E4750004	C 4.7UF, 25V	2	
C6603	F1K2J102A014	C 1000UF, K,6.3V	1	
C6604	F2A2V470A020	E 47UF, 350V	1	
C6605	ECJ2XB1H104K	C 0.1UF, K, 50V	1	
C6606	F1K2J102A014	C 1000UF, K,6.3V	1	
C6620	ECJ3XB2J222K	C 2200PF, K,630V	1	
C6641	ECQE2105RKB	P 1UF, 250V	1	
C6661,62	F1K2J102A014	C 1000UF, K,6.3V	2	
C6671	F1L1E4750004	C 4.7UF, 25V	1	
C6681,82	F1L1E4750004	C 4.7UF, 25V	2	
C6683	ECJ2XB1H104K	C 0.1UF, K, 50V	1	
C6691	ECA2CM101	E 100UF, 160V	1	
C6701-08	ECJ2XB1H104K	C 0.1UF, K, 50V	8	
C6721	ECA1HM101	E 100UF, 50V	1	
C6723-25	F1L1E4750004	C 4.7UF, 25V	3	
C6726,27	TCUY1C105ZFN	C 1UF, 16V	2	
C6728	ECJ2XC1H102J	C 1000PF, J, 50V	1	
C6752	TCUY1C105ZFN	C 1UF, 16V	1	
C6753	F1L1E4750004	C 4.7UF, 25V	1	
C6754	ECA1VM470	E 47UF, 35V	1	
C6755	ECJ2XB1H104K	C 0.1UF, K, 50V	1	
C6771	TCUY1C105ZFN	C 1UF, 16V	1	
C6772,73	F1L1E4750004	C 4.7UF, 25V	2	
C6775	F1L1E4750004	C 4.7UF, 25V	1	
C6776,77	ECJ2XB1H104K	C 0.1UF, K, 50V	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C6791	EEUFC1E221	E 220UF, 25V	1	
C6795,96	EEUFC1E221	E 220UF, 25V	2	
C6801	F2A2E470A022	E 47UF, 250V	1	
C6802	ECQE6223KF	P 0.022UF, K,400V	1	
C6803	ECKD3D221KBP	C 220PF, K, 2KV	1	
C6804	F2A2E100A022	E 10UF, 250V	1	
C6805	ECJ2XC1H102J	C 1000PF, J, 50V	1	
C6806	ECA2CM101	E 100UF, 160V	1	
C6807	ECJ2XC1H471J	C 470PF, J, 50V	1	
C6811	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C6812	F1L1E4750004	C 4.7UF, 25V	1	
C6813	ECA2CM101	E 100UF, 160V	1	
C6814	ECA1VM151	E 150UF, 35V	1	
C6815	ECJ2XB1H104K	C 0.1UF, K, 50V	1	
C6822	F2A2V100A019	E 10UF, 350V	1	
C6823	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C6841	ECA2DHG101	E 100UF, 200V	1	
C6842	ECA2CM101	E 100UF, 160V	1	
C6845	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C6861	TCUY1C105ZFN	C 1UF, 16V	1	
C6862	ECJ3YB1E105K	C 1UF, K, 25V	1	
C6863	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C6871	TCUY1C105ZFN	C 1UF, 16V	1	
C6872	ECJ3YB1E105K	C 1UF, K, 25V	1	
C6873	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C6901	ECJ2XB1H102K	C 1000PF, K, 50V	1	
C6902	TCUY1C105ZFN	C 1UF, 16V	1	
C6904	TCUY1C105ZFN	C 1UF, 16V	1	
C6906	TCUY1C105ZFN	C 1UF, 16V	1	
C6908	TCUY1C105ZFN	C 1UF, 16V	1	
C6910	TCUY1C105ZFN	C 1UF, 16V	1	
C6912	TCUY1C105ZFN	C 1UF, 16V	1	
C6914-18	ECJ2XB1H221K	C 220PF, K, 50V	5	
C6931	ECJ2XB1H102K	C 1000PF, K, 50V	1	
C6932-35	F1L2E105A013	E 0.10UF, 25V	4	
C6951	ECJ2XB1H102K	C 1000PF, K, 50V	1	
C6952	TCUY1C105ZFN	C 1UF, 16V	1	
C6955	TCUY1C105ZFN	C 1UF, 16V	1	
C6957,58	TCUY1C105ZFN	C 1UF, 16V	2	
C6961	TCUY1C105ZFN	C 1UF, 16V	1	
C6963	TCUY1C105ZFN	C 1UF, 16V	1	
C6964-68	ECJ2XB1H221K	C 220PF, K, 50V	5	
C6981	ECJ2XB1H102K	C 1000PF, K, 50V	1	
C6982-85	F1L2E105A013	E 0.10UF, 25V	4	
C7103	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7105	TCUY1C105ZFN	C 1UF, 16V	1	
C7106	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7108	ECJ1XC1H101J	C 100PF, J, 50V	1	
C7109	TCUY1C105ZFN	C 1UF, 16V	1	
C7112	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7114	TCUY1C105ZFN	C 1UF, 16V	1	
C7115	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7117	ECJ1XC1H101J	C 100PF, J, 50V	1	
C7118	TCUY1C105ZFN	C 1UF, 16V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C7121	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7123	TCUY1C105ZFN	C 1UF, 16V	1	
C7124	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7126	ECJ1XC1H101J	C 100PF, J, 50V	1	
C7127,28	TCUY1C105ZFN	C 1UF, 16V	2	
C7130	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C7201-03	TCUY1C105ZFN	C 1UF, 16V	3	
C7205	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C7206	TCUY1C105ZFN	C 1UF, 16V	1	
C7208	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C7210	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C7213	ECJ1XC1H101J	C 100PF, J, 50V	1	
C7215	TCUY1C105ZFN	C 1UF, 16V	1	
C7216	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C7218	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C7221,22	ECJ1XC1H101J	C 100PF, J, 50V	2	
C7225	ECJ1XC1H101J	C 100PF, J, 50V	1	
C7226	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7228	TCUY1C105ZFN	C 1UF, 16V	1	
C7229,30	ECJ3XB2A474K	C 0.47UF, 6.3V	2	
C7232	TCUY1C105ZFN	C 1UF, 16V	1	
C7233,34	ECJ3XB2A474K	C 0.47UF, 6.3V	2	
C7236	TCUY1C105ZFN	C 1UF, 16V	1	
C7237,38	ECJ3XB2A474K	C 0.47UF, 6.3V	2	
C7240	TCUY1C105ZFN	C 1UF, 16V	1	
C7241	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7243	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C7247	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C7249	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C7251	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C7302	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C7306,07	ECJ1XB1C104K	C 0.1UF, Z, 16V	2	
C7309,10	ECJ1XB1C104K	C 0.1UF, Z, 16V	2	
C7311,12	TCUY1C105ZFN	C 1UF, 16V	2	
C7313-15	ECJ1XC1H101J	C 100PF, J, 50V	3	
C7316,17	TCUY1C105ZFN	C 1UF, 16V	2	
C7318	ECJ1XC1H101J	C 100PF, J, 50V	1	
C7319	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7321	TCUY1C105ZFN	C 1UF, 16V	1	
C7322	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7331	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7333	TCUY1C105ZFN	C 1UF, 16V	1	
C7334,35	ECJ3XB2A474K	C 0.47UF, 6.3V	2	
C7337	TCUY1C105ZFN	C 1UF, 16V	1	
C7338,39	ECJ3XB2A474K	C 0.47UF, 6.3V	2	
C7341	TCUY1C105ZFN	C 1UF, 16V	1	
C7342	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7403	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7405	TCUY1C105ZFN	C 1UF, 16V	1	
C7406	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7407	ECJ1XC1H101J	C 100PF, J, 50V	1	
C7408	TCUY1C105ZFN	C 1UF, 16V	1	
C7411	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7413	TCUY1C105ZFN	C 1UF, 16V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C7414	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7415	ECJ1XC1H101J	C 100PF, J, 50V	1	
C7416	TCUY1C105ZFN	C 1UF, 16V	1	
C7419	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7421	TCUY1C105ZFN	C 1UF, 16V	1	
C7422	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7423	ECJ1XC1H101J	C 100PF, J, 50V	1	
C7424	TCUY1C105ZFN	C 1UF, 16V	1	
C7427	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7429	TCUY1C105ZFN	C 1UF, 16V	1	
C7430	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7431	ECJ1XC1H101J	C 100PF, J, 50V	1	
C7432,33	TCUY1C105ZFN	C 1UF, 16V	2	
C7435	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C7440-43	ECJ1XB1C104K	C 0.1UF, Z, 16V	4	
C7502	TCUY1C105ZFN	C 1UF, 16V	1	
C7504	TCUY1C105ZFN	C 1UF, 16V	1	
C7506	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C7508	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C7509	ECJ1XC1H101J	C 100PF, J, 50V	1	
C7510	TCUY1C105ZFN	C 1UF, 16V	1	
C7511	ECJ1XC1H101J	C 100PF, J, 50V	1	
C7513,14	ECJ1XB1C104K	C 0.1UF, Z, 16V	2	
C7517	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C7518	TCUY1C105ZFN	C 1UF, 16V	1	
C7521	ECJ1XC1H101J	C 100PF, J, 50V	1	
C7523	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C7524	ECJ1XC1H101J	C 100PF, J, 50V	1	
C7525	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7527	TCUY1C105ZFN	C 1UF, 16V	1	
C7528,29	ECJ3XB2A474K	C 0.47UF, 6.3V	2	
C7531	TCUY1C105ZFN	C 1UF, 16V	1	
C7532,33	ECJ3XB2A474K	C 0.47UF, 6.3V	2	
C7535	TCUY1C105ZFN	C 1UF, 16V	1	
C7536	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7557	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7559	TCUY1C105ZFN	C 1UF, 16V	1	
C7560	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7562	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C7564	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C7566	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C7603	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7605	TCUY1C105ZFN	C 1UF, 16V	1	
C7606	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7607	ECJ1XC1H101J	C 100PF, J, 50V	1	
C7608	TCUY1C105ZFN	C 1UF, 16V	1	
C7611	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7613	TCUY1C105ZFN	C 1UF, 16V	1	
C7614	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7615	ECJ1XC1H101J	C 100PF, J, 50V	1	
C7616	TCUY1C105ZFN	C 1UF, 16V	1	
C7619	ECJ3XB2A474K	C 0.47UF, 6.3V	1	
C7621	TCUY1C105ZFN	C 1UF, 16V	1	
C7622	ECJ3XB2A474K	C 0.47UF, 6.3V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C7623	ECJ1XC1H101J	C 100PF, J, 50V	1	
C7624,25	TCUY1C105ZFN	C 1UF, 16V	2	
C7626	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9028,29	F1J0J1060004	C 0.010UF, K, 16V	2	
C9033,34	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C9035,36	F1J0J1060004	C 0.010UF, K, 16V	2	
C9037	ECJ1VB1H103K	C 0.001UF, K, 50V	1	
C9039	F1J0J1060004	C 0.010UF, K, 16V	1	
C9040	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9044-53	ECJ1XF1C104Z	C 0.1UF, Z, 16V	10	
C9055-57	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C9058	F1J0J1060004	C 0.010UF, K, 16V	1	
C9300-25	ECJ1XB1C104K	C 0.1UF, Z, 16V	26	
C9327-51	ECJ1XB1C104K	C 0.1UF, Z, 16V	25	
C9352	EEFCD0G560ER	56UF,	1	
C9355-59	ECJ1XB1C104K	C 0.1UF, Z, 16V	5	
C9360-64	ECJ3XB0J106M	C 10UF, M,6.3V	5	
C9365	EEFCD0G560ER	56UF,	1	
C9366,67	ECJ1VF1H103Z	C 0.010UF, Z, 50V	2	
C9368	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9442-70	ECJ1XB1C104K	C 0.1UF, Z, 16V	29	
C9472-96	ECJ1XB1C104K	C 0.1UF, Z, 16V	25	
C9497	EEFCD0G560ER	56UF,	1	
C9512,13	ECJ1XB1C104K	C 0.1UF, Z, 16V	2	
C9514,15	ECJ2VF1C105Z	C 1UF, Z, 16V	2	
C9516-25	ECJ1XB1C104K	C 0.1UF, Z, 16V	10	
C9526	F1J0J1060004	C 0.010UF, K, 16V	1	
C9527-30	ECJ1XB1C104K	C 0.1UF, Z, 16V	4	
C9531	F1J0J1060004	C 0.010UF, K, 16V	1	
C9532	ECJ1XC1H101K	C 100PF, K, 50V	1	
C9533	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9534-38	ECJ3XB0J106M	C 10UF, M,6.3V	5	
C9539	EEFCD0G560ER	56UF,	1	
C9540,41	ECJ1VF1H103Z	C 0.010UF, Z, 50V	2	
C9542	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9546,47	ECJ1VC1H120J	C 12PF, J, 50V	2	
C9548	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9552	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9554	F1J0J1060004	C 0.010UF, K, 16V	1	
C9557	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C9601	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9608	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9800	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9801	ECJ1VB1E272K	C 2700PF, K, 25V	1	
C9802	ECJ1XC1H470J	C 47PF, J, 50V	1	
C9803	ECJ1VB1H472K	C 4700PF, K, 50V	1	
C9804	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9805	ECJ1VB0J475K	C 4.7UF, K, 6.3V	1	
C9806	ECGRL0G680ER	C 68PF, J, 4V	1	
C9807,08	ECJ3YB1E106M	C 10 UF, K, 25V	2	
C9809	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9815,16	ECGRL0G680ER	C 68PF, J, 4V	2	
C9817,18	ECJ3YB1E106M	C 10 UF, K, 25V	2	
C9822	F1J0J1060004	C 0.010UF, K, 16V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C9823,24	ECJ3YB1E106M	C 10 UF, K, 25V	2	
C9825	ECJ1XC1H101K	C 100PF, K, 50V	1	
C9826	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9827	F1J0J1060004	C 0.010UF, K, 16V	1	
C9830-32	ECJ3XB1C106M	C 1.0UF, K, 16V	3	
C9833	ECJ3YB1E106M	C 10 UF, K, 25V	1	
C9837	ECJ3XB1C106M	C 1.0UF, K, 16V	1	
C9838	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9840	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9841,42	ECJ2VF1C105Z	C 1UF, Z, 16V	2	
C9843	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9844	ECJ1VF1H103Z	C 0.010UF, Z, 50V	1	
C9845,46	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C9847,48	ECJ1VB1E104K	C 0.10UF, K, 25V	2	
C9880,81	ECJ1XB1H102K	C 1000UF, Z, 50V	2	
C9882	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9883	ECJ1VB1H822K	C 8200PF, K, 50V	1	
C9884	ECJ1VC1H100C	C 10PF, C, 50V	1	
C9885	ECJ1XB1H102K	C 1000UF, Z, 50V	1	
C9886	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9887	ECJ1VB0J475K	C 4.7UF, K, 6.3V	1	
C9891	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9896	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9897	ECJ1VB1H822K	C 8200PF, K, 50V	1	
C9898	ECJ1VC1H100C	C 10PF, C, 50V	1	
C9899	ECJ1XB1H102K	C 1000UF, Z, 50V	1	
C9926	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9967	ECJ1VB0J475K	C 4.7UF, K, 6.3V	1	
C9971	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
CA1-11	K1MN68BA0002	68P CONNECTOR	11	
CB1-11	K1MN68BA0002	68P CONNECTOR	11	
D3	K1KY40B00003	40P CONNECTOR	1	
D5	K1KB31BA0064	31P CONNECTOR	1	
D6	K1KA21A00011	21P CONNECTOR	1	
D20	K1KA20BA0296	20P CONNECTOR	1	
D25	K1KA20AA0009	20P CONNECTOR	1	
D31	K1MN80BA0076	80P CONNECTOR	1	
D32	K1MN55BA0076	55P CONNECTOR	1	
D33	K1MN68BA0076	68P CONNECTOR	1	
D34	K1MN80BA0076	80P CONNECTOR	1	
D1106,07	MA729	DIODE	2	
D1117	MA3036L	ZENER DIODE	1	
D1119	MA704A	DIODE	1	
D1121	MA729	DIODE	1	
D2011-14	MA111	DIODE	4	
D2119	B0BC01100001	ZENER DIODE	1	
D2300,01	MA111	DIODE	2	
D2303,04	MA111	DIODE	2	
D2309	MA111	DIODE	1	
D2510,11	MA8056-M	ZENER DIODE	2	
D2512	MA8043LTX	ZENER DIODE	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D2520	LNJ107W5PRW	LED	1	
D2524	MA8056-M	ZENER DIODE	1	
D3003	MA8140M	ZENER DIODE	1	
D3005,06	MA8140M	ZENER DIODE	2	
D3017	MA8140M	ZENER DIODE	1	
D3021-23	MA111	DIODE	3	
D3024	B0BC01100001	ZENER DIODE	1	
D3038-43	MA8140M	ZENER DIODE	6	
D3044	MA111	DIODE	1	
D3045-52	MA8140M	ZENER DIODE	8	
D3100	MA8140M	ZENER DIODE	1	
D3334-39	MA111	DIODE	6	
D3702	MA8140M	ZENER DIODE	1	
D4019-38	EZJZ0V80008B	VARISTOR	20	
D4041	EZJZ0V80008B	VARISTOR	1	
D4044,45	EZJZ0V80008B	VARISTOR	2	
D4047,48	MA3056M	ZENER DIODE	2	
D4049-52	B0HCMM000014	DIODE	4	
D5606	B0BC01100001	ZENER DIODE	1	
D5607	B0BC6R600005	ZENER DIODE	1	
D5610	B0BC4R700007	ZENER DIODE	1	(PA)
D5610	MA3X78900L	ZENER DIODE	1	(H)
D5612	B0BC3R700006	ZENER DIODE	1	
D5618	B0BC03900015	ZENER DIODE	1	
D5634	MA111	DIODE	1	
D5635	MA3047H	ZENER DIODE	1	
D5637,38	MA152	DIODE	2	
D5639	MA3047H	ZENER DIODE	1	
D5640	MA3039H	ZENER DIODE	1	
D5641	MA152	DIODE	1	
D5642	MA3120M	ZENER DIODE	1	
D5643	MA152	DIODE	1	
D5644	MA3068M	ZENER DIODE	1	
D5646,47	MA152	DIODE	2	
D5649	MA111	DIODE	1	
D5801	B0JCME000037	DIODE	1	
D5804	MA3120M	ZENER DIODE	1	
D5805,06	MA152	DIODE	2	
D5807	MA111	DIODE	1	
D6001	B0HBSN000008	DIODE	1	
D6021,22	B0HBSN000008	DIODE	2	
D6032	MA111	DIODE	1	
D6041	B0ECHP000003	DIODE	1	
D6051	B0ECHP000003	DIODE	1	
D6061,62	B0HBSN000008	DIODE	2	
D6071,72	B0HBSN000008	DIODE	2	
D6081,82	B0HBSN000008	DIODE	2	
D6091	B0HBSN000008	DIODE	1	
D6092	B0ECHP000003	DIODE	1	
D6101-04	B0JCME000037	DIODE	4	
D6105	MA111	DIODE	1	
D6131,32	B0ECHP000003	DIODE	2	
D6151-54	B0ECHP000003	DIODE	4	
D6191,92	B0ECHP000003	DIODE	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D6211	B0JCME000037	DIODE	1	
D6212	B0ECHP000003	DIODE	1	
D6221	B0ECHP000003	DIODE	1	
D6222,23	MA111	DIODE	2	
D6251,52	MA8330M	ZENER DIODE	2	
D6253	LNJ301MPUJA	LED	1	
D6254	MA8051L	ZENER DIODE	1	
D6255	MA111	DIODE	1	
D6401	B0HBSN000008	DIODE	1	
D6404	B0HBSN000008	DIODE	1	
D6431,32	B0HBSP000019	DIODE	2	
D6441	B0ECHP000003	DIODE	1	
D6451	B0ECHP000003	DIODE	1	
D6461,62	B0HBSN000008	DIODE	2	
D6466	MA111	DIODE	1	
D6471	B0HBSN000008	DIODE	1	
D6472	B0ECHP000003	DIODE	1	
D6477	MA111	DIODE	1	
D6478	B0HCKS000002	DIODE	1	
D6480	MA111	DIODE	1	
D6481,82	B0HBSN000008	DIODE	2	
D6491	B0HBSP000019	DIODE	1	
D6497	MA111	DIODE	1	
D6501,02	B0ECHP000003	DIODE	2	
D6521-24	B0ECHP000003	DIODE	4	
D6581,82	MA8330M	ZENER DIODE	2	
D6583	LNJ301MPUJA	LED	1	
D6584	MA8051L	ZENER DIODE	1	
D6585	MA111	DIODE	1	
D6601	MA8240M	ZENER DIODE	1	
D6602	B0ECHP000003	DIODE	1	
D6603	MA8240M	ZENER DIODE	1	
D6604	MA111	DIODE	1	
D6605	MA8051L	ZENER DIODE	1	
D6606	B0HCMM000014	DIODE	1	
D6607	MA111	DIODE	1	
D6619,20	B0HCKS000002	DIODE	2	
D6621-24	B0HDSM000005	DIODE	4	
D6641,42	B0HCKS000002	DIODE	2	
D6643	MA111	DIODE	1	
D6661	MA111	DIODE	1	
D6662-64	MA8330M	ZENER DIODE	3	
D6665	MA8051L	ZENER DIODE	1	
D6666,67	MA111	DIODE	2	
D6671	MA111	DIODE	1	
D6682	B0HCMM000014	DIODE	1	
D6683,84	MA111	DIODE	2	
D6686,87	MA111	DIODE	2	
D6701,02	MA8056H	ZENER DIODE	2	
D6721	B0HCKS000002	DIODE	1	
D6723,24	B0JCME000037	DIODE	2	
D6725	B0ECHP000003	DIODE	1	
D6726-33	MA8056H	ZENER DIODE	8	
D6734	MA111	DIODE	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D6752	B0JCME000037	DIODE	1	
D6758	B0ECHP000003	DIODE	1	
D6760,61	MA111	DIODE	2	
D6771	B0JCME000037	DIODE	1	
D6773	B0HCKS000002	DIODE	1	
D6791	MA8200M	ZENER DIODE	1	
D6802	B0BC01000044	ZENER DIODE	1	
D6803	B0HCKS000002	DIODE	1	
D6804	B0ECHP000003	DIODE	1	
D6805	MA111	DIODE	1	
D6806	B0ECHP000003	DIODE	1	
D6807-10	B0HCMM000014	DIODE	4	
D6822,23	MA111	DIODE	2	
D6825	MA8330M	ZENER DIODE	1	
D6826	MA111	DIODE	1	
D6841	B0HCKS000002	DIODE	1	
D6842,43	MA111	DIODE	2	
D6859	B0ECHP000003	DIODE	1	
D6860	B0HCKS000002	DIODE	1	
D6861	MA8051L	ZENER DIODE	1	
D6862	MA111	DIODE	1	
D6871	MA8051L	ZENER DIODE	1	
D6872	MA111	DIODE	1	
D6901,02	MA8056H	ZENER DIODE	2	
D6903,04	B0ECHP000003	DIODE	2	
D6951,52	MA8056H	ZENER DIODE	2	
D6953,54	B0ECHP000003	DIODE	2	
D9017-19	MA3033	ZENER DIODE	3	
D9020	MA728	DIODE	1	
D9035	MA728	DIODE	1	
D9300,01	MA152K	DIODE	2	
D9400,01	MA152K	DIODE	2	
D9800	B0JCME000037	DIODE	1	
D9801	B0JCDD000002	DIODE	1	
D9802	MA728	DIODE	1	
D9804	MA152K	DIODE	1	
D9805,06	B0JCGD000002	DIODE	2	
D9807,08	MA152K	DIODE	2	
D9809,10	B0JCGD000002	DIODE	2	
D9812	B0JCME000037	DIODE	1	
D9813	B0JCDD000002	DIODE	1	
D9814	B0JCME000037	DIODE	1	
D9815	B0JCDD000002	DIODE	1	
DG1	K1KY80A00011	80P CONNECTOR	1	
DG2	K1KA15B00074	15P CONNECTOR	1	
DG3	K1KY40B00003	40P CONNECTOR	1	
DG5	K1KB21BA0063	21P CONNECTOR	1	
DG7	K1KA20B00155	20P CONNECTOR	1	
DG8,G9	K1FY119D0001	CONNECTOR	2	
DG15	K1KY40B00003	40P CONNECTOR	1	
DG20	K1MN40B00045	40P CONNECTOR	1	
DG35	K1KA07BA0047	7P CONNECTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
FL3301,02	J0HABB000003	LC FILTER	2	
FL3303-05	J0HABB000004	LC FILTER	3	
FL7201	J0HABH000013	LC FILTER	1	
FL7301	J0HABH000013	LC FILTER	1	
FL7501	J0HABH000013	LC FILTER	1	
FL9300	F1J1E1040022	C 0.10UF, Z, 25V	1	
FL9301	J0HABH000013	LC FILTER	1	
FL9302-04	F1J1E1040022	C 0.10UF, Z, 25V	3	
FL9305,06	J0HABH000013	LC FILTER	2	
FL9400,01	J0HABH000013	LC FILTER	2	
FL9402-04	F1J1E1040022	C 0.10UF, Z, 25V	3	
FL9501,02	J0HABH000013	LC FILTER	2	
FL9800,01	J0HABH000013	LC FILTER	2	
FL9803,04	J0HABH000012	LC FILTER	2	
FL9805-07	J0HABH000013	LC FILTER	3	
G1	K1KA12A00317	12P CONNECTOR	1	
G3	K1KA03BA0047	3P CONNECTOR	1	
G51	K1KA30AA0009	30P CONNECTOR	1	
GK3	K1KA03BA0061	3P CONNECTOR	1	
H1	K1KY80A00011	80P CONNECTOR	1	
H2	K1KA15A00148	15P CONNECTOR	1	
H5,H6	K1KA15AA0288	15P CONNECTOR	2	
H15	K1KA04AA0150	4P CONNECTOR	1	
H40	K1KA20AA0009	20P CONNECTOR	1	
H51	K1KA30AA0009	30P CONNECTOR	1	
HC01	K1KA21A00011	21P CONNECTOR	1	
HC12	K1KA09AA0190	9P CONNECTOR	1	
HC15	K1KY40B00003	40P CONNECTOR	1	
HC21	K1KA08AA0193	8P CONNECTOR	1	
HC22	K1KA11AA0194	11P CONNECTOR	1	
IC1100	C3ABPG000145	IC	1	
IC1101	TVRN774	IC	1	
IC1102	TVRN764	IC	1	
IC1103	MN103SB20RGL	IC	1	
IC1110	C0CBCAD00016	IC	1	
IC1111	C0EBY0000041	IC	1	
IC2103	AN77L08M	IC	1	
IC2104	C0ABBA000168	IC	1	
IC2105	AN15862A-VT	IC	1	
IC2106	C1AB00002468	IC	1	
IC2109	C1BB00000947	IC	1	
IC2302	C1AB00002451	IC	1	
IC2304	C0ABBA000168	IC	1	
IC2306	C0ABBA000168	IC	1	
IC2511	B3L000000020	IC	1	
IC3005	AN15867A-VT	IC	1	
IC3301	C0JBAZ002205	IC	1	
IC4013	C0CBCBF00009	IC	1	
IC4016	C0CBCAC00275	IC	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC4018	C0CBCAC00275	IC	1	
IC4019	C1AB00002456	IC	1	
IC4022	TVRN916	IC	1	
IC4023	TVRN917	IC	1	
IC4025	C0FBBK000038	IC	1	
IC4026	C1AB00002442	IC	1	
IC4027	C0DBFFD00003	IC	1	
IC4028	C0ABBB000230	IC	1	
IC4029	C0CBCAC00282	IC	1	
IC4030	C0CBCBC00190	IC	1	
IC4032	C0DBGYY00052	IC	1	
IC4035	C0CBCAF00031	IC	1	
IC4036	C0JBAP000020	IC	1	
IC4037	MN84522-A	IC	1	
IC4038	C3ABQJ000048	IC	1	
IC5601A	N0BG2DE00001	IC	1	
IC5602	EHMDD9851	LINEAR IC	1	
IC5603	C0DBAJB00004	IC	1	
IC5604	C0DBZGC00067	IC	1	
IC5801	C0DBAZF00003	IC	1	
IC6131	C0ZBZ0000895	IC	1	
IC6151	C0ZBZ0001324	IC	1	
IC6191	C0ZBZ0000895	IC	1	
IC6211	C0ZBZ0001325	IC	1	
IC6221	AN1431M	LINEAR IC	1	
IC6241	C0JBAZ000005	IC	1	
IC6251	NJM2903M	INTEGRATED CIRCUIT	1	
IC6471	C0DBEKA00003	IC	1	
IC6472	C0JBAA000377	IC	1	
IC6501	C0ZBZ0000895	IC	1	
IC6521	C0ZBZ0001324	IC	1	
IC6561,62	C0JBAZ000005	IC	2	
IC6581	NJM2903M	INTEGRATED CIRCUIT	1	
IC6601	C0ZBZ0001325	IC	1	
IC6602	C0JBAB000715	IC	1	
IC6671	C0ZBZ0001325	IC	1	
IC6681	C0ZBZ0001325	IC	1	
IC6682	C0JBAA000377	IC	1	
IC6721,22	C0JBAZ000994	IC	2	
IC6724,25	C0CBADC00089	IC	2	
IC6751	C0CBADC00089	IC	1	
IC6752	C0ZBZ0001325	IC	1	
IC6753	C0JBAB000715	IC	1	
IC6771	C0CBADC00089	IC	1	
IC6772	C0ZBZ0001325	IC	1	
IC6773,74	C0JBAA000377	IC	2	
IC6791	N0BF1FB00001	IC	1	
IC6801,02	C0DBEMB00005	IC	2	
IC6803	C0DAAMH00005	IC	1	
IC6821	C0DBEMB00005	IC	1	
IC6841	C0DBEMB00005	IC	1	
IC6861	NJM2903M	INTEGRATED CIRCUIT	1	
IC6871	NJM2903M	INTEGRATED CIRCUIT	1	
IC6901-06	AN16071A-VT	IC	6	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC6951-56	AN16071A-VT	IC	6	
IC7101	C0JBAZ001120	IC	1	
IC7201-09	C0JBAZ001120	IC	9	
IC7301-05	C0JBAZ001120	IC	5	
IC7401-05	C0JBAZ001120	IC	5	
IC7501-09	C0JBAZ001120	IC	9	
IC7601	C0JBAZ001120	IC	1	
IC9001	TVRN811	IC	1	
IC9002	C0ZBZ0001330	IC	1	
IC9003	TVRN805	IC	1	
IC9007	TVRN814	IC	1	
IC9011	C0EBF0000431	IC	1	
IC9200	C1ZBZ0003186	IC	1	
IC9300	MN84521-A	IC	1	
IC9301	C3ABQJ000051	IC	1	
IC9304	TVRN825	IC	1	
IC9400	MN84521-A	IC	1	
IC9401	C3ABQJ000051	IC	1	
IC9402	C0JBAZ002614	IC	1	
IC9500	C1ZBZ0002599	IC	1	
IC9503-05	C0JBAZ000856	IC	3	
IC9602	PST9128NR	IC (LOGIC)	1	
IC9800	C0DBAYY00054	IC	1	
IC9801	C0DBZFG00066	IC	1	
IC9802,03	C0JBAZ000856	IC	2	
IC9806	C0DBAHD00011	IC	1	
IC9807	C0DBAYY00054	IC	1	
IC9809	C0DBAYY00054	IC	1	
JK2003	K2HA204A0038	JACK	1	
JK3001	K1FB315AA001	CONNECTOR	1	
JK3100	TJB0A639	TERMINAL	1	
JK3701C	K4AK22B00002	TERMINAL BOARD	1	
JS002	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
JS012	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
JS1100-02	ERJ2GE0R00	M 0.0 OHM, J,0.063W	3	
JS1109	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
JS1117	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
JS2021,22	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
JS2026	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
JS2031-33	ERJ3GEY0R00	M 0 OHM, 1/16W	3	
JS2108,09	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
JS2123,24	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
JS2300-03	ERJ6GEY0R00	M 0 OHM, 1/10W	4	
JS2319	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS2331	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS3002	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
JS3010-15	ERJ6GEY0R00	M 0 OHM, 1/10W	6	
JS3023	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
JS3029	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
JS3033-35	ERJ3GEY0R00	M 0 OHM, 1/16W	3	
JS3202	J0JCC0000241	CHIP INDUCTOR	1	
JS3205	J0JCC0000241	CHIP INDUCTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
JS3206	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
JS3215	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS3230	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
JS3237	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
JS3239	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
JS3244,45	J0JCC0000241	CHIP INDUCTOR	2	
JS3246	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS3252	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS3255	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS3256	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
JS3265,66	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
JS3302-04	ERJ3GEY0R00	M 0 OHM, 1/16W	3	
JS3307-12	ERJ3GEY0R00	M 0 OHM, 1/16W	6	
JS3352	J0JCC0000241	CHIP INDUCTOR	1	
JS3354-59	J0JCC0000241	CHIP INDUCTOR	6	
JS3362,63	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
JS3368	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
JS3402,03	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
JS3404,05	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
JS3704,05	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
JS3707,08	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
JS3711-14	ERJ6GEY0R00	M 0 OHM, 1/10W	4	
JS3716	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
JS4016,17	ERJ2GE0R00	M 0.0 OHM, J,0.063W	2	
JS4022-24	ERJ2GE0R00	M 0.0 OHM, J,0.063W	3	
JS4025,26	ERJ2GEJ101	M 100 OHM, J,0.063W	2	
JS4027,28	ERJ2GE0R00	M 0.0 OHM, J,0.063W	2	
JS4029	ERJ2GEJ221	M 220 OHM, J,0.063W	1	
JS4033-40	ERJ2GE0R00	M 0.0 OHM, J,0.063W	8	
JS4046	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
JS4069	ERJ2GEJ221	M 220 OHM, J,0.063W	1	
JS4103,04	ERJ2GE0R00	M 0.0 OHM, J,0.063W	2	
JS4111	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
JS4122	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
JS5601	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
K1	K1KY12B00001	12P CONNECTOR	1	
L001	J0JGC0000021	CHIP INDUCTOR COIL	1	
L007	J0JCC0000241	CHIP INDUCTOR	1	
L013	J0JCC0000241	CHIP INDUCTOR	1	
L021	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
L031,32	J0JGC0000021	CHIP INDUCTOR COIL	2	
L1101-04	J0JHC0000078	CHIP INDUCTOR	4	
L1109	J0JHC0000078	CHIP INDUCTOR	1	
L2001,02	J0JCC0000364	CHIP INDUCTOR	2	
L2003,04	TSK1032	BEAD CHOKE	2	
L2007,08	TSK1032	BEAD CHOKE	2	
L2011,12	TSK1032	BEAD CHOKE	2	
L2015,16	TSK1032	BEAD CHOKE	2	
L2107	TSK1032	BEAD CHOKE	1	
L2108	J0JCC0000241	CHIP INDUCTOR	1	
L2109,10	TSK1032	BEAD CHOKE	2	
L2111,12	J0JCC0000241	CHIP INDUCTOR	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
L2115	J0JCC0000241	CHIP INDUCTOR	1	
L2117	ELESE6R8KA	PEAKING COIL	1	
L2118	EXCELDR35C	BEAD CHOKE	1	
L2123	J0JCC0000241	CHIP INDUCTOR	1	
L2178,79	J0JCC0000241	CHIP INDUCTOR	2	
L2182-87	J0JCC0000241	CHIP INDUCTOR	6	
L2204	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
L2205,06	J0JCC0000241	CHIP INDUCTOR	2	
L2300-03	G0C330MA0049	PEAKING COIL	4	
L2308	TALL08N3R9MA	INDUCTION COIL	1	
L3000	G0C101K00023	PEAKING COIL	1	
L3001-03	TSK1032	BEAD CHOKE	3	
L3009,10	TSK1032	BEAD CHOKE	2	
L3013	TSK1032	BEAD CHOKE	1	
L3026	TSK1032	BEAD CHOKE	1	
L3212	TSK1032	BEAD CHOKE	1	
L3216	J0JGC0000021	CHIP INDUCTOR COIL	1	
L3219	J0JGC0000021	CHIP INDUCTOR COIL	1	
L3700,01	J0JCC0000364	CHIP INDUCTOR	2	
L3707,08	TSK1032	BEAD CHOKE	2	
L4023	J0JCC0000077	CHIP INDUCTOR	1	
L4029	J0JHC0000078	CHIP INDUCTOR	1	
L4031	J0JHC0000078	CHIP INDUCTOR	1	
L4038	J0JHC0000078	CHIP INDUCTOR	1	
L4040-46	J0JHC0000078	CHIP INDUCTOR	7	
L4048	J0JHC0000078	CHIP INDUCTOR	1	
L4049	J0JBC0000080	CHIP INDUCTOR	1	
L4050,51	J0JHC0000078	CHIP INDUCTOR	2	
L4052	J0JCC0000077	CHIP INDUCTOR	1	
L4053-55	J0JHC0000078	CHIP INDUCTOR	3	
L4056,57	J0JCC0000077	CHIP INDUCTOR	2	
L4060,61	J0JCC0000077	CHIP INDUCTOR	2	
L4065,66	J0JHC0000078	CHIP INDUCTOR	2	
L4068-70	J0JHC0000078	CHIP INDUCTOR	3	
L4071	J0JBC0000080	CHIP INDUCTOR	1	
L4073	J0JHC0000078	CHIP INDUCTOR	1	
L4075,76	J0JHC0000078	CHIP INDUCTOR	2	
L4077	J0JCC0000077	CHIP INDUCTOR	1	
L4078	J0JHC0000078	CHIP INDUCTOR	1	
L5602	TALL08N2R7MA	INDUCTION COIL	1	
L5604	TALL08N2R7MA	INDUCTION COIL	1	
L5605	G0A2R7ZA0021	CHOKE COIL	1	
L5606,07	G0A220GA0002	CHOKE COIL	2	
L5608	G1C100MA0072	INDUCTION COIL	1	
L5609	G0A220GA0002	CHOKE COIL	1	
L5610	G1C470MA0077	INDUCTION COIL	1	
L5612	TALL08N2R7MA	INDUCTION COIL	1	
L5615	TALL08N150KA	INDUCTION COIL	1	
L5621	G1C330MA0234	INDUCTION COIL	1	
L5622,23	G1C150MA0234	INDUCTION COIL	2	
L5624	G1C330MA0234	INDUCTION COIL	1	
L5651	G0A220GA0002	CHOKE COIL	1	
L5801	G0C101K00023	PEAKING COIL	1	
L5802	TALL08N101KA	INDUCTION COIL	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
L6002-04	G0CR82KA0147	CHOKE COIL	3	
L6011-14	G0A1R4MA0003	CHOKE COIL	4	
L6061-68	G0ZZ00002183	PEAKING COIL	8	
L6081-88	G0ZZ00002183	PEAKING COIL	8	
L6101,02	J0JJC0000011	CHIP INDUCTOR	2	
L6103	G0ZZ00002183	PEAKING COIL	1	
L6104,05	J0JJC0000011	CHIP INDUCTOR	2	
L6211,12	J0JJC0000011	CHIP INDUCTOR	2	
L6221	G0ZZ00002183	PEAKING COIL	1	
L6241	G0ZZ00002183	PEAKING COIL	1	
L6262	G0ZZ00002183	PEAKING COIL	1	
L6271,72	G0ZZ00002183	PEAKING COIL	2	
L6291	G0ZZ00002183	PEAKING COIL	1	
L6398,99	J0JJC0000011	CHIP INDUCTOR	2	
L6401,02	G0CR82KA0147	CHOKE COIL	2	
L6404	G0CR82KA0147	CHOKE COIL	1	
L6411-14	G0A1R4MA0003	CHOKE COIL	4	
L6461-68	G0ZZ00002183	PEAKING COIL	8	
L6472,73	G0ZZ00002183	PEAKING COIL	2	
L6481-88	G0ZZ00002183	PEAKING COIL	8	
L6591,92	G0ZZ00002183	PEAKING COIL	2	
L6601,02	G0ZZ00002183	PEAKING COIL	2	
L6801,02	J0JJC0000011	CHIP INDUCTOR	2	
L6841	J0JJC0000011	CHIP INDUCTOR	1	
L9501,02	J0JHC0000078	CHIP INDUCTOR	2	
L9503	G1C150KA0038	INDUCTION COIL	1	
L9800	G1C3R0MA0248	INDUCTION COIL	1	
L9801,02	G1C2R2MA0241	INDUCTION COIL	2	
L9810	J0JHC0000045	CHIP INDUCTOR	1	
PA2	K1KA05AA0192	5P CONNECTOR	1	
PA5	K1KA11AA0194	11P CONNECTOR	1	
PA10	K1KA06A00452	6P CONNECTOR	1	
PA20	K1MN40A00024	40P CONNECTOR	1	
PA31-34	K1KA03AA0192	3P CONNECTOR	4	
PA40	K1KA20AA0009	20P CONNECTOR	1	
PA2055	K5H1622A0023	FUSE	1	
PA3100	K5H1622A0023	FUSE	1	
PA3104	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
PA9800	K5H4022A0023	FUSE	1	
PC6480	B3PBA0000223	IC	1	
PC6701-03	B3PBA0000233	IC	3	
PC6704	B3PBA0000234	IC	1	
PC6705	B3PBA0000233	IC	1	
PC6760	B3PBA0000223	IC	1	
PC6801	B3PBA0000223	IC	1	
PC6861	B3PBA0000223	IC	1	
PC6871	B3PBA0000223	IC	1	
Q002	2SA207700L	TRANSISTOR	1	
Q1100-03	2SC584500L	TRANSISTOR	4	
Q1108	2SC584500L	TRANSISTOR	1	
Q1109,10	B1CBHD000002	FET	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
Q1111	2SC584500L	TRANSISTOR	1	
Q1113-16	2SC584500L	TRANSISTOR	4	
Q1130	2SC584500L	TRANSISTOR	1	
Q1131	B1ABCF000138	TRANSISTOR	1	
Q1134	2SC584500L	TRANSISTOR	1	
Q1135	B1ABCF000138	TRANSISTOR	1	
Q1137	2SC584500L	TRANSISTOR	1	
Q1139-43	2SC584500L	TRANSISTOR	5	
Q2001,02	2SC584500L	TRANSISTOR	2	
Q2011	2SA207700L	TRANSISTOR	1	
Q2012	2SC584500L	TRANSISTOR	1	
Q2013	2SA207700L	TRANSISTOR	1	
Q2102-05	2SA207700L	TRANSISTOR	4	
Q2106	2SC584500L	TRANSISTOR	1	
Q2108	2SC584500L	TRANSISTOR	1	
Q2112-14	2SC584500L	TRANSISTOR	3	
Q2300 02	2SA207700L	TRANSISTOR	1	
Q2300	2SC584500L	TRANSISTOR	1	
Q2301	2SD601A	TRANSISTOR	1	
Q2301 02	2SD601A	TRANSISTOR	1	
Q2302	2SC584500L	TRANSISTOR	1	
Q2303	2SD601A	TRANSISTOR	1	
Q2306,07	2SA207700L	TRANSISTOR	2	
Q2314-17	2SC584500L	TRANSISTOR	4	
Q2510,11	2SD601A	TRANSISTOR	2	
Q2513	2SD601A	TRANSISTOR	1	
Q3002	2SA207700L	TRANSISTOR	1	
Q3008	2SA207700L	TRANSISTOR	1	
Q3011	2SA207700L	TRANSISTOR	1	
Q3014,15	2SA207700L	TRANSISTOR	2	
Q3017	2SA207700L	TRANSISTOR	1	
Q3204-07	2SC584500L	TRANSISTOR	4	
Q3210	2SA207700L	TRANSISTOR	1	
Q3331-33	2SC2480	TRANSISTOR	3	
Q4050	2SC584500L	TRANSISTOR	1	
Q4053	2SC584500L	TRANSISTOR	1	
Q4055-59	2SA207700L	TRANSISTOR	5	
Q4061-69	2SC584500L	TRANSISTOR	9	
Q4070,71	B1MBACA00008	TRANSISTOR	2	
Q4082,83	2SK1228	FET	2	
Q4918	B1ABCF000138	TRANSISTOR	1	
Q4919	2SC584500L	TRANSISTOR	1	
Q5601	B1DHDC000028	TRANSISTOR	1	
Q5602	2SD601A	TRANSISTOR	1	
Q5603	B1DHDC000028	TRANSISTOR	1	
Q5604,05	2SD601A	TRANSISTOR	2	
Q5610	2SD601A	TRANSISTOR	1	
Q5613	2SD601A	TRANSISTOR	1	
Q5614	2SK3065T100	FET	1	
Q5641-43	2SA207700L	TRANSISTOR	3	
Q5644	2SD601A	TRANSISTOR	1	
Q6001-03	B1JADN000001	TRANSISTOR	3	
Q6021-23	B1JADN000001	TRANSISTOR	3	
Q6041-43	B1JADN000002	TRANSISTOR	3	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
Q6052,53	B1JADN000002	TRANSISTOR	2	
Q6101,02	B1DFKM000002	TRANSISTOR	2	
Q6103	B1ABNF000006	TRANSISTOR	1	
Q6104	B1ADNF000006	TRANSISTOR	1	
Q6105,06	B1DFKM000002	TRANSISTOR	2	
Q6111	2SK326800L	FET	1	
Q6112	B1DFKM000002	TRANSISTOR	1	
Q6114	B1DFKM000002	TRANSISTOR	1	
Q6141	B1ABNF000006	TRANSISTOR	1	
Q6142	B1ADNF000006	TRANSISTOR	1	
Q6146	B1ABNF000006	TRANSISTOR	1	
Q6147	B1ADNF000006	TRANSISTOR	1	
Q6171	2SD2185	TRANSISTOR	1	
Q6172	B1ADRD000001	TRANSISTOR	1	
Q6181	2SD2185	TRANSISTOR	1	
Q6182	B1ADRD000001	TRANSISTOR	1	
Q6221	2SD1263A	TRANSISTOR	1	
Q6222	2SC3063	TRANSISTOR	1	
Q6251	2SD601A	TRANSISTOR	1	
Q6401-03	B1JADN000001	TRANSISTOR	3	
Q6421-23	B1JAEP000001	TRANSISTOR	3	
Q6441-43	B1JADN000002	TRANSISTOR	3	
Q6452,53	B1JADP000002	TRANSISTOR	2	
Q6471	B1CHGD000006	TRANSISTOR	1	
Q6511	B1ABNF000006	TRANSISTOR	1	
Q6512	B1ADNF000006	TRANSISTOR	1	
Q6516	B1ABNF000006	TRANSISTOR	1	
Q6517	B1ADNF000006	TRANSISTOR	1	
Q6531	2SD2185	TRANSISTOR	1	
Q6532	B1ADRD000001	TRANSISTOR	1	
Q6551	2SD2185	TRANSISTOR	1	
Q6552	B1ADRD000001	TRANSISTOR	1	
Q6581	2SD601A	TRANSISTOR	1	
Q6601	B1DEDS000001	TRANSISTOR	1	
Q6602	2SD601A	TRANSISTOR	1	
Q6621,22	B1DFKM000001	TRANSISTOR	2	
Q6641-45	B1DFKM000001	TRANSISTOR	5	
Q6647,48	B1DFKM000001	TRANSISTOR	2	
Q6661	B1DEET000002	TRANSISTOR	1	
Q6662	2SD601A	TRANSISTOR	1	
Q6663	2SD2185	TRANSISTOR	1	
Q6671-73	B1DEDS000001	TRANSISTOR	3	
Q6680	B1ADNF000006	TRANSISTOR	1	
Q6681,82	2SK389500L	FET	2	
Q6691	2SK620	FET	1	
Q6742,43	2SD601A	TRANSISTOR	2	
Q6744	2SK620	FET	1	
Q6762	B1ADNF000006	TRANSISTOR	1	
Q6781	B1ABNF000006	TRANSISTOR	1	
Q6782	B1ADNF000006	TRANSISTOR	1	
Q6791	2SD601A	TRANSISTOR	1	
Q6803	2SD814A	TRANSISTOR	1	
Q6821	2SD1263A	TRANSISTOR	1	
Q6822	2SC3063	TRANSISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
Q6824	2SD601A	TRANSISTOR	1	
Q6841	2SD1263A	TRANSISTOR	1	
Q6842	2SC1473A	TRANSISTOR	1	
Q9044	2SD601A	TRANSISTOR	1	
Q9046	2SD601A	TRANSISTOR	1	
Q9049	2SB709A	TRANSISTOR	1	
Q9050-54	2SD601A	TRANSISTOR	5	
Q9057,58	B1CBHD000002	FET	2	
Q9100	2SD601A	TRANSISTOR	1	
Q9200,01	B1CBHD000002	FET	2	
Q9301,02	2SD601A	TRANSISTOR	2	
Q9400-02	2SD601A	TRANSISTOR	3	
Q9500	B1CBHD000002	FET	1	
Q9800,01	B1MBEDA00015	TRANSISTOR	2	
Q9803	B1MBEDA00015	TRANSISTOR	1	
Q9805,06	2SD601A	TRANSISTOR	2	
R005	ERJ3EKF5600	M 560 OHM, 1/16W	1	
R008	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R009	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R011	ERJ6GEYJ271	M 270 OHM,J,1/10W	1	
R014	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R017,18	ERJ3GEYJ220	M 22 OHM,J,1/16W	2	
R019,20	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R022	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R023	ERJ3EKF4700	M 470 OHM, 1/16W	1	
R028	ERJ3EKF3602	M 36KOHM, 1/16W	1	
R029	ERJ3EKF6802	M 68KOHM, 1/16W	1	
R1101	ERJ2GEJ101	M 100 OHM, J,0.063W	1	
R1102,03	ERJ2GEJ102	M 1KOHM, J,0.063W	2	
R1105,06	ERJ2GEJ102	M 1KOHM, J,0.063W	2	
R1108-12	ERJ2GEJ101	M 100 OHM, J,0.063W	5	
R1113	ERJ2GEJ332	M 3.3KOHM, J,0.063W	1	
R1114	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R1116	ERJ2GEJ562	M 5.6KOHM,J,0.063W	1	
R1117	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R1118,19	EXB2HV680J	RESISTOR ARRAY	2	
R1121,22	ERJ2GEJ220	M 22 OHM, J,0.063W	2	
R1123	ERJ2GEJ473	M 47KOHM,J,0.063W	1	
R1124,25	ERJ2GEJ332	M 3.3KOHM, J,0.063W	2	
R1129,30	ERJ2GEJ473	M 47KOHM,J,0.063W	2	
R1131,32	ERJ2GEJ101	M 100 OHM, J,0.063W	2	
R1133,34	ERJ2GEJ102	M 1KOHM, J,0.063W	2	
R1135	ERJ2GEJ103	M 10KOHM, J,0.063W	1	
R1140,41	ERJ2GEJ680	M 68 OHM, J,0.063W	2	
R1146	ERJ2GEJ271	M 270 OHM, J,0.063W	1	
R1147,48	D1HG5608A002	NETWORK RESISTER	2	
R1149	EXB2HV680J	RESISTOR ARRAY	1	
R1151	ERJ2GEJ101	M 100 OHM, J,0.063W	1	
R1152	ERJ2GEJ102	M 1KOHM, J,0.063W	1	
R1153	ERJ2GEJ101	M 100 OHM, J,0.063W	1	
R1154,55	ERJ2GEJ472	M 4.7KOHM, J,0.063W	2	
R1156	ERJ2GEJ104	M 100KOHM, J,0.063W	1	
R1157	ERJ2GEJ101	M 100 OHM, J,0.063W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R1158	ERJ2GEJ273	M 27KOHM ,J,0.063W	1	
R1159	ERJ2GEJ123X	M 12KOHM ,J,0.063W	1	
R1160	ERJ2GEJ473	M 47KOHM,J,0.063W	1	
R1162	ERJ2GEJ473	M 47KOHM,J,0.063W	1	
R1164	ERJ2GEJ123X	M 12KOHM ,J,0.063W	1	
R1165	ERJ2GEJ153	M 15KOHM ,J,0.063W	1	
R1168,69	ERJ2GE0R00	M 0.0 OHM, J,0.063W	2	
R1174	ERJ2GEJ101	M 100 OHM, J,0.063W	1	
R1175	ERJ2GEJ563	M 56KOHM ,J,0.063W	1	
R1176	ERJ2GEJ123X	M 12KOHM ,J,0.063W	1	
R1177	ERJ2GEJ101	M 100 OHM, J,0.063W	1	
R1181	ERJ2GEJ101	M 100 OHM, J,0.063W	1	
R1182	ERJ2GEJ683	M 68KOHM, J,0.063W	1	
R1183	EXB28V680JX	RESISTOR ARRAY	1	
R1184	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R1186	ERJ2GEJ473	M 47KOHM,J,0.063W	1	
R1187	EXB2HV680J	RESISTOR ARRAY	1	
R1188,89	ERJ2GEJ103	M 10KOHM, J,0.063W	2	
R1191	ERJ2GEJ473	M 47KOHM,J,0.063W	1	
R1197	ERJ2GEJ473	M 47KOHM,J,0.063W	1	
R1199	ERJ2GEJ473	M 47KOHM,J,0.063W	1	
R1200	EXB2HV680J	RESISTOR ARRAY	1	
R1203	ERJ2GEJ102	M 1KOHM, J,0.063W	1	
R1207	ERJ2GEJ104	M 100KOHM, J,0.063W	1	
R1212	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R1214	ERJ2GEJ103	M 10KOHM, J,0.063W	1	
R1215-17	ERJ2GEJ101	M 100 OHM, J,0.063W	3	
R1218	ERJ2GEJ680	M 68 OHM, J,0.063W	1	
R1220	ERJ2GEJ680	M 68 OHM, J,0.063W	1	
R1221	ERJ2GEJ332	M 3.3KOHM, J,0.063W	1	
R1222	ERJ2GEJ330	M 33 OHM, J,0.063W	1	
R1223	ERJ2GEJ102	M 1KOHM, J,0.063W	1	
R1224	ERJ2GEJ473	M 47KOHM,J,0.063W	1	
R1225,26	ERJ2GEJ220	M 22 OHM, J,0.063W	2	
R1228	ERJ2GEJ220	M 22 OHM, J,0.063W	1	
R1229	ERJ2GEJ182	M 1.8KOHM, J,0.063W	1	
R1230	ERJ2GEJ220	M 22 OHM, J,0.063W	1	
R1231	ERJ2GEJ473	M 47KOHM,J,0.063W	1	
R1232,33	ERJ2GEJ332	M 3.3KOHM, J,0.063W	2	
R1234	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R1235,36	ERJ2GEJ272	M 2.7KOHM, J,0.063W	2	
R1238	ERJ2GEJ473	M 47KOHM,J,0.063W	1	
R1239	ERJ3EKF1202	M 12KOHM, 1/16W	1	
R1240	ERJ2GEJ473	M 47KOHM,J,0.063W	1	
R1241	ERJ2GEJ822	M 8.2KOHM, J,0.063W	1	
R1243	ERJ2GEJ102	M 1KOHM, J,0.063W	1	
R1246	ERJ2GEJ912	M 9.1KOHM, J,0.063W	1	
R1249	ERJ2GEJ473	M 47KOHM,J,0.063W	1	
R1250	ERJ2GEJ224	M 220KOHM, J,0.063W	1	
R1251,52	EXB2HV101J	RESISTOR ARRAY	2	
R1256	ERJ2GEJ102	M 1KOHM, J,0.063W	1	
R1263,64	ERJ2GEJ101	M 100 OHM, J,0.063W	2	
R1269	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R1270,71	ERJ2GEJ220	M 22 OHM, J,0.063W	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R1275	ERJ3EKF7151	M7.15KOHM, 1/16W	1	
R1279,80	ERJ2GEJ220	M 22 OHM, J,0.063W	2	
R1281	ERJ2GEJ102	M 1KOHM, J,0.063W	1	
R1282	ERJ2GEJ153	M 15KOHM ,J,0.063W	1	
R1283	ERJ2GEJ101	M 100 OHM, J,0.063W	1	
R1284	ERJ2GEJ682	M 6.8KOHM, J,0.063W	1	
R1290	ERJ2GEJ472	M 4.7KOHM, J,0.063W	1	
R1298-02	ERJ2GE0R00	M 0.0 OHM, J,0.063W	5	
R1307	ERJ2GEJ104	M 100KOHM, J,0.063W	1	
R1308	ERJ2GEJ273	M 27KOHM ,J,0.063W	1	
R1309-12	ERJ2GEJ220	M 22 OHM, J,0.063W	4	
R1313,14	ERJ2GEJ103	M 10KOHM, J,0.063W	2	
R1315	ERJ2GEJ333	M 33KOHM, J,0.063W	1	
R1316	ERJ2GEJ103	M 10KOHM, J,0.063W	1	
R1318,19	ERJ2GEJ512X	M5.12KOHM, J,0.063W	2	
R1321	ERJ2GEJ153	M 15KOHM ,J,0.063W	1	
R1322	ERJ2GEJ100	M 10 OHM, J,0.063W	1	
R1323,24	ERJ2GEJ823	M 82KOHM, J,0.063W	2	
R1325,26	ERJ2GEJ104	M 100KOHM, J,0.063W	2	
R1327,28	ERJ2GEJ683	M 68KOHM, J,0.063W	2	
R1329,30	ERJ2GEJ473	M 47KOHM,J,0.063W	2	
R1331,32	ERJ2GEJ104	M 100KOHM, J,0.063W	2	
R1333	ERJ2GEJ101	M 100 OHM, J,0.063W	1	
R1340	ERJ2GEJ473	M 47KOHM,J,0.063W	1	
R1344	ERJ2GEJ101	M 100 OHM, J,0.063W	1	
R1346	ERJ2GEJ473	M 47KOHM,J,0.063W	1	
R1351	ERJ2GEJ101	M 100 OHM, J,0.063W	1	
R1352	ERJ2GEJ473	M 47KOHM,J,0.063W	1	
R1354	ERJ2GEJ101	M 100 OHM, J,0.063W	1	
R1363	ERJ2GEJ473	M 47KOHM,J,0.063W	1	
R1367	ERJ2GEJ333	M 33KOHM, J,0.063W	1	
R1368	ERJ2GEJ183	M 18KOHM ,J,0.063W	1	
R1369	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R1372	ERJ2GEJ473	M 47KOHM,J,0.063W	1	
R1375	ERJ2GEJ104	M 100KOHM, J,0.063W	1	
R1376	ERJ2GEJ273	M 27KOHM ,J,0.063W	1	
R1377	ERJ8GEY0R00	M 0 OHM, 1/8W	1	
R1379	ERJ2GEJ331	M 330 OHM, J,0.063W	1	
R1382,83	ERJ2GE0R00	M 0.0 OHM, J,0.063W	2	
R1384	ERJ2GEJ101	M 100 OHM, J,0.063W	1	
R1389	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R1391,92	ERJ2GEJ473	M 47KOHM,J,0.063W	2	
R1408	ERJ2GEJ104	M 100KOHM, J,0.063W	1	
R1410	ERJ2GEJ102	M 1KOHM, J,0.063W	1	
R1411	ERJ2GEJ472	M 4.7KOHM, J,0.063W	1	
R1412,13	ERJ2GEJ104	M 100KOHM, J,0.063W	2	
R1414	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R1426-32	ERJ8GEY0R00	M 0 OHM, 1/8W	7	
R1436,37	ERJ2GEJ561	M 60 OHM, J,0.063W	2	
R1439	ERJ2GEJ271	M 270 OHM, J,0.063W	1	
R1441	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R1446,47	ERJ2GEJ471	M 470 OHM, J,0.063W	2	
R1448,49	ERJ2GEJ473	M 47KOHM,J,0.063W	2	
R1451,52	ERJ2GEJ473	M 47KOHM,J,0.063W	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R1454	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R1458,59	ERJ2GEJ101	M 100 OHM, J,0.063W	2	
R1466	ERJ2GEJ103	M 10KOHM, J,0.063W	1	
R1467	ERJ2GEJ473	M 47KOHM,J,0.063W	1	
R1470	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R1472,73	ERJ2GEJ301	M 300 OHM, J,0.063W	2	
R1474	ERJ8GEY0R00	M 0 OHM, 1/8W	1	
R1475	ERJ2GEJ271	M 270 OHM, J,0.063W	1	
R1478	ERJ2GEJ680	M 68 OHM, J,0.063W	1	
R1479,80	ERJ2GEJ473	M 47KOHM,J,0.063W	2	
R1490	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R1526	ERJ2GEJ102	M 1KOHM, J,0.063W	1	
R1530,31	ERJ2GE0R00	M 0.0 OHM, J,0.063W	2	
R1554,55	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R1556	ERJ2GEJ331	M 330 OHM, J,0.063W	1	
R2005	ERJ3GEYJ104	M 100KOHM,J,1/16W	1	
R2006-11	ERJ6GEYJ223	M 22KOHM,J,1/10W	6	
R2012	ERJ3GEYJ104	M 100KOHM,J,1/16W	1	
R2013,14	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	2	
R2015,16	ERJ3GEYJ331	M 330 OHM,J,1/16W	2	
R2042	ERJ3GEYJ105	M 1MOHM,J,1/16W	1	
R2043	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R2044	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R2045,46	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R2048	ERJ6GEYJ471	M 470 OHM,J,1/10W	1	
R2049,50	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R2051,52	ERJ6GEYJ184	M 180KOHM,J,1/10W	2	
R2053	ERJ6GEYJ471	M 470 OHM,J,1/10W	1	
R2054	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R2113,14	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R2116	J0JCC0000241	CHIP INDUCTOR	1	
R2124,25	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	
R2126,27	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	2	
R2128,29	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	
R2130	ERJ3EKF1002	M 10KOHM, 1/16W	1	
R2131	ERJ3EKF8201	M 8.2KOHM, 1/16W	1	
R2132	ERJ3GEYJ333	M 33KOHM,J,1/16W	1	
R2133	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R2137	ERJ3GEYJ333	M 33KOHM,J,1/16W	1	
R2138	ERJ3EKF1002	M 10KOHM, 1/16W	1	
R2147	ERJ3EKF1002	M 10KOHM, 1/16W	1	
R2148,49	ERJ3EKF6342	M6.34KOHM, 1/16W	2	
R2152	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R2153	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R2154	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R2155,56	ERJ3GEYJ221	M 220 OHM,J,1/16W	2	
R2158	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R2160	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R2162	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R2164	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R2165,66	ERJ3GEYJ102	M 1KOHM,J,1/16W	2	
R2167	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R2168,69	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	2	
R2170-73	ERJ3GEYJ221	M 220 OHM,J,1/16W	4	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R2176,77	ERJ3GEYJ221	M 220 OHM,J,1/16W	2	
R2181	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R2182,83	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	
R2184-87	ERJ3GEYJ221	M 220 OHM,J,1/16W	4	
R2188	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R2192,93	ERJ3GEYJ221	M 220 OHM,J,1/16W	2	
R2195,96	ERJ3GEYJ104	M 100KOHM,J,1/16W	2	
R2197	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R2202	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R2203	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R2204	ERJ6GEYJ561	M 560 OHM,J,1/10W	1	
R2208	ERJ6GEYJ471	M 470 OHM,J,1/10W	1	
R2209	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	1	
R2210	ERJ6GEYJ122	M 1.2KOHM,J,1/10W	1	
R2211	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R2213	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R2214	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	1	
R2215	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R2219	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R2220	ERJ3GEYJ153	M 15KOHM,J,1/16W	1	
R2224,25	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R2227	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R2228	ERJ3GEYJ153	M 15KOHM,J,1/16W	1	
R2229	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R2230,31	ERJ3GEYJ104	M 100KOHM,J,1/16W	2	
R2232,33	ERJ3GEYJ153	M 15KOHM,J,1/16W	2	
R2234-37	ERJ3GEYJ103	M 10KOHM,J,1/16W	4	
R2238,39	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R2302	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	
R2303	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	1	
R2304	ERJ3GEYJ104	M 100KOHM,J,1/16W	1	
R2305	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R2306	ERJ6GEYJ821	M 820 OHM,J,1/10W	1	
R2307	ERJ3GEYJ104	M 100KOHM,J,1/16W	1	
R2310	ERJ3GEY0R00	M 0 OHM, 1/16W	1	(PA)
R2310	ERJ3GEYJ184	M 180KOHM,J,1/16W	1	(H)
R2311	ERJ3GEY0R00	M 0 OHM, 1/16W	1	(PA)
R2311	ERJ6GEYJ182	M 1.8KOHM,J,1/10W	1	(H)
R2312	ERJ3EKF1002	M 10KOHM, 1/16W	1	
R2323,24	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R2325	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R2329	ERJ3EKF1003	M 100KOHM, 1/16W	1	
R2332	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R2338	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R2341	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R2349	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R2354	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R2357	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R2359	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R2360	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R2361	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	1	
R2363	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R2364	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R2365	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R2366	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R2368	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R2369	ERJ3GEYJ183	M 18KOHM,J,1/16W	1	
R2372,73	ERJ6GEYJ681	M 680 OHM,J,1/10W	2	
R2375	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R2376	ERJ3EKF1002	M 10KOHM, 1/16W	1	
R2379,80	ERJ6ENF2201	M 2.2KOHM, 1/10W	2	
R2383	ERJ3EKF3301	M 3.3KOHM, 1/16W	1	
R2384	ERJ3EKF1151	M1.15KOHM, 1/16W	1	
R2387	ERJ3EKF1151	M1.15KOHM, 1/16W	1	
R2388	ERJ3EKF3301	M 3.3KOHM, 1/16W	1	(PA)
R2388,89	ERJ6GEYJ102	M 1KOHM,J,1/10W	2	(H)
R2390	ERJ3GEYJ203	M 20KOHM,J,1/16W	1	
R2391	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R2392	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	
R2393	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R2396	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R2397	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	(H)
R2397	ERJ6GEY0R00	M 0 OHM, 1/10W	1	(PA)
R2398	ERJ3GEYJ123	M 12KOHM,J,1/16W	1	(H)
R2398	ERJ6GEY0R00	M 0 OHM, 1/10W	1	(PA)
R2399	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R2400	ERJ6GEYJ182	M 1.8KOHM,J,1/10W	1	
R2401,02	ERJ3GEYJ331	M 330 OHM,J,1/16W	2	
R2403	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R2404,05	ERJ3GEYJ331	M 330 OHM,J,1/16W	2	
R2406	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R2407	ERJ3EKF1241	M1.24KOHM, 1/16W	1	
R2408	ERJ3EKF1071	M1.07KOHM, 1/16W	1	
R2409	ERJ3EKF1621	M1.62KOHM, 1/16W	1	
R2410	ERJ3EKF7870	M 787 OHM, 1/16W	1	
R2421	ERJ3EKF1621	M1.62KOHM, 1/16W	1	
R2422	ERJ3EKF7870	M 787 OHM, 1/16W	1	
R2512	ERJ6GEYJ470	M 47 OHM,J,1/10W	1	
R2516	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	
R2517	ERJ6GEYJ470	M 47 OHM,J,1/10W	1	
R2520	ERJ3GEYJ224	M 220KOHM,J,1/16W	1	
R2521	ERJ6GEYJ470	M 47 OHM,J,1/10W	1	
R2524	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	
R2525	ERJ3EKF5760	M 576 OHM, 1/16W	1	
R2530	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	
R2531	ERJ3EKF2700	M 270 OHM, 1/16W	1	
R2542	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R2556,57	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	2	
R2558	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R3001-10	ERJ6ENF75R0	M 75 OHM, 1/10W	10	
R3011	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3012	ERJ6ENF75R0	M 75 OHM, 1/10W	1	
R3020	ERJ6ENF2202	M 2.2KOHM, 1/10W	1	
R3021,22	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R3027	ERJ6ENF75R0	M 75 OHM, 1/10W	1	
R3039	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R3044,45	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R3048	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R3049	**ERJ3GEYJ221**	**M 220 OHM,J,1/16W**	**1**	
R3050	**ERJ3GEYJ242**	**M 2.4KOHM,J,1/16W**	**1**	
R3051	**ERJ3GEYJ682**	**M 6.8KOHM,J,1/16W**	**1**	
R3057,58	**ERJ3GEY0R00**	**M 0 OHM, 1/16W**	**2**	
R3059,60	**ERJ3GEYJ221**	**M 220 OHM,J,1/16W**	**2**	
R3061	**ERJ3GEY0R00**	**M 0 OHM, 1/16W**	**1**	
R3062-64	**ERJ3GEYJ221**	**M 220 OHM,J,1/16W**	**3**	
R3068	**ERJ6ENF75R0**	**M 75 OHM, 1/10W**	**1**	
R3070	**ERJ3GEYJ102**	**M 1KOHM,J,1/16W**	**1**	
R3072-75	**ERJ3GEYJ221**	**M 220 OHM,J,1/16W**	**4**	
R3076	**ERJ3GEY0R00**	**M 0 OHM, 1/16W**	**1**	
R3080	**ERJ3GEY0R00**	**M 0 OHM, 1/16W**	**1**	
R3087	**ERJ3GEYJ221**	**M 220 OHM,J,1/16W**	**1**	
R3089,90	**ERJ3GEYJ220**	**M 22 OHM,J,1/16W**	**2**	
R3092	**ERJ3GEYJ221**	**M 220 OHM,J,1/16W**	**1**	
R3094,95	**ERJ3GEYJ221**	**M 220 OHM,J,1/16W**	**2**	
R3096	**ERJ3GEY0R00**	**M 0 OHM, 1/16W**	**1**	
R3097	**ERJ3GEYJ221**	**M 220 OHM,J,1/16W**	**1**	
R3099-01	**ERJ3GEYJ221**	**M 220 OHM,J,1/16W**	**3**	
R3102	**ERJ3GEYJ682**	**M 6.8KOHM,J,1/16W**	**1**	
R3111-14	**ERJ3GEY0R00**	**M 0 OHM, 1/16W**	**4**	
R3115	**ERJ3GEYJ101**	**M 100 OHM,J,1/16W**	**1**	
R3118	**ERJ3GEYJ101**	**M 100 OHM,J,1/16W**	**1**	
R3119,20	**ERJ3EKF91R0**	**M 91 OHM, 1/16W**	**2**	
R3121	**ERJ3EKF1300V**	**M 130 OHM, 1/16W**	**1**	
R3122	**ERJ3GEYJ101**	**M 100 OHM,J,1/16W**	**1**	
R3123	**ERJ3EKF1300V**	**M 130 OHM, 1/16W**	**1**	
R3125	**ERJ6GEYJ102**	**M 1KOHM,J,1/10W**	**1**	
R3126	**ERJ3GEYJ101**	**M 100 OHM,J,1/16W**	**1**	
R3127	**ERJ6GEYJ102**	**M 1KOHM,J,1/10W**	**1**	
R3134	**ERJ3GEYJ104**	**M 100KOHM,J,1/16W**	**1**	
R3135	**ERJ3EKF91R0**	**M 91 OHM, 1/16W**	**1**	
R3138	**ERJ3EKF1000**	**M 100 OHM, 1/16W**	**1**	
R3139	**ERJ6GEYJ102**	**M 1KOHM,J,1/10W**	**1**	
R3140	**ERJ3EKF1300V**	**M 130 OHM, 1/16W**	**1**	
R3141	**ERJ6GEYJ102**	**M 1KOHM,J,1/10W**	**1**	
R3160,61	**ERJ6GEYJ102**	**M 1KOHM,J,1/10W**	**2**	
R3167	**ERJ3GEYJ102**	**M 1KOHM,J,1/16W**	**1**	
R3174-76	**ERJ3GEYJ221**	**M 220 OHM,J,1/16W**	**3**	
R3206	**ERJ3GEYJ101**	**M 100 OHM,J,1/16W**	**1**	
R3213,14	**ERJ3GEY0R00**	**M 0 OHM, 1/16W**	**2**	
R3215	**J0JCC0000241**	**CHIP INDUCTOR**	**1**	
R3219	**ERJ3GEYJ101**	**M 100 OHM,J,1/16W**	**1**	
R3222	**ERJ3GEY0R00**	**M 0 OHM, 1/16W**	**1**	
R3224	**ERJ3GEY0R00**	**M 0 OHM, 1/16W**	**1**	
R3227-29	**ERJ3GEY0R00**	**M 0 OHM, 1/16W**	**3**	
R3233,34	**ERJ6ENF75R0**	**M 75 OHM, 1/10W**	**2**	
R3238	**ERJ3GEY0R00**	**M 0 OHM, 1/16W**	**1**	
R3239-42	**ERJ3GEYJ103**	**M 10KOHM,J,1/16W**	**4**	
R3250,51	**ERJ3GEY0R00**	**M 0 OHM, 1/16W**	**2**	
R3253	**ERJ3GEYJ221**	**M 220 OHM,J,1/16W**	**1**	
R3254	**ERJ6GEY0R00**	**M 0 OHM, 1/10W**	**1**	
R3255	**ERJ6GEYJ561**	**M 560 OHM,J,1/10W**	**1**	
R3256	**ERJ3GEY0R00**	**M 0 OHM, 1/16W**	**1**	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R3259	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R3261-64	ERJ3GEY0R00	M 0 OHM, 1/16W	4	
R3266,67	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R3278,79	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R3281	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3283,84	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R3286	J0JCC0000241	CHIP INDUCTOR	1	
R3290-93	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	4	
R3302	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R3305	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R3306,07	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	2	
R3308,09	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
R3310	ERJ6ENF75R0	M 75 OHM, 1/10W	1	
R3312	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R3313	ERJ6ENF75R0	M 75 OHM, 1/10W	1	
R3317	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R3318	ERJ6ENF75R0	M 75 OHM, 1/10W	1	
R3320	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R3323,24	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
R3330	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3336	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R3337	ERJ3GEYJ183	M 18KOHM,J,1/16W	1	
R3338	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R3339	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R3340	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R3341	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R3342	ERJ3GEYJ183	M 18KOHM,J,1/16W	1	
R3343	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R3344	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R3345	ERJ3GEYJ183	M 18KOHM,J,1/16W	1	
R3346	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R3347	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R3348,49	ERJ3GEYJ680	M 68 OHM,J,1/16W	2	
R3350-52	ERJ3GEYJ510	M 51 OHM,J,1/16W	3	
R3353	ERJ3EKF6802	M 68KOHM, 1/16W	1	
R3354	ERJ3EKF3602	M 36KOHM, 1/16W	1	
R3408,09	ERJ3GEYJ361	M 360 OHM,J,1/16W	2	
R3704	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3709-11	ERJ3GEY0R00	M 0 OHM, 1/16W	3	
R3714	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3716,17	ERJ6GEYJ184	M 180KOHM,J,1/10W	2	
R3721	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R3732	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3733	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R3736-41	ERJ3GEY0R00	M 0 OHM, 1/16W	6	
R3746	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R3748	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R3750	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R3751	ERJ6ENF1432	M14.3KOHM, 1/10W	1	
R3753	ERJ6ENF1741	M1.74KOHM, 1/10W	1	
R3754	ERJ6ENF1621	M1.62KOHM, 1/10W	1	
R3755	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R3757	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R3758	ERJ6ENF6651	M6.65KOHM, 1/10W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R3759-64	ERJ6GEY0R00	M 0 OHM, 1/10W	6	
R3765	ERJ6ENF2321	M2.32KOHM, 1/10W	1	
R3767	ERJ6ENF3161	M3.16KOHM, 1/10W	1	
R3768	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R4001	ERJ3EKF1211	M1.21KOHM, 1/16W	1	
R4004	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R4008	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R4010	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R4018	ERJ2GEJ103	M 10KOHM, J,0.063W	1	
R4019	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R4021	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R4022	ERJ2GEJ102	M 1KOHM, J,0.063W	1	
R4024,25	ERJ2GE0R00	M 0.0 OHM, J,0.063W	2	
R4026,27	ERJ2GEJ102	M 1KOHM, J,0.063W	2	
R4029	ERJ2GEJ220	M 22 OHM, J,0.063W	1	
R4031-33	ERJ2GEJ103	M 10KOHM, J,0.063W	3	
R4037-39	D1HG1038A002	NETWORK RESISTER	3	
R4040,41	ERJ2GE0R00	M 0.0 OHM, J,0.063W	2	
R4045,46	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R4257	ERJ3EKF3302	M 33KOHM, 1/16W	1	
R4265	ERJ3EKF3242	M32.4KOHM, 1/16W	1	
R4269	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R4271,72	ERJ2GE0R00	M 0.0 OHM, J,0.063W	2	
R4286,87	ERJ2GE0R00	M 0.0 OHM, J,0.063W	2	
R4293	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R4338-43	ERJ2GE0R00	M 0.0 OHM, J,0.063W	6	
R4457	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R4465	ERJ2GEJ224	M 220KOHM, J,0.063W	1	
R4469,70	ERJ3EKF1500	M 150 OHM, 1/16W	2	
R4474	ERJ3EKF1211	M1.21KOHM, 1/16W	1	
R4479,80	ERJ3EKF4220	M 422 OHM, 1/10W	2	
R4481	ERJ3EKF2201	M 2.2KOHM, 1/16W	1	
R4482,83	ERJ3EKF1781	M1.78KOHM, 1/16W	2	
R4486	ERJ3EKF4870	M 487 OHM, 1/16W	1	
R4487	ERJ3EKF5600	M 560 OHM, 1/16W	1	
R4488	ERJ3EKF2201	M 2.2KOHM, 1/16W	1	
R4490	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R4492	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R4495	ERJ3EKF4302	M 43KOHM, 1/16W	1	
R4496-99	ERJ6GEYJ102	M 1KOHM,J,1/10W	4	
R4500	ERJ3EKF2702V	M27.0KOHM, 1/16W	1	
R4501,02	ERJ6GEYJ102	M 1KOHM,J,1/10W	2	
R4503	ERJ3EKF1600	M 160 OHM, 1/16W	1	
R4507,08	ERJ2GE0R00	M 0.0 OHM, J,0.063W	2	
R4510	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R4517	ERJ3EKF1371	M 13.7 OHM, 1/16W	1	
R4520	ERJ3EKF1691	M1.69KOHM, 1/16W	1	
R4521,22	ERJ2GEJ220	M 22 OHM, J,0.063W	2	
R4527	ERJ2GEJ220	M 22 OHM, J,0.063W	1	
R4533	ERJ2GEJ220	M 22 OHM, J,0.063W	1	
R4534,35	ERJ2GEJ101	M 100 OHM, J,0.063W	2	
R4544	ERJ2GEJ220	M 22 OHM, J,0.063W	1	
R4550	EXB28V220J	RESISTOR ARRAY	1	
R4552	EXB28V220J	RESISTOR ARRAY	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R4554	ERJ2GEJ220	M 22 OHM, J,0.063W	1	
R4555	EXB28V220J	RESISTOR ARRAY	1	
R4560,61	EXB28V220J	RESISTOR ARRAY	2	
R4563-65	ERJ2GEJ220	M 22 OHM, J,0.063W	3	
R4568	ERJ2GEJ101	M 100 OHM, J,0.063W	1	
R4572	ERJ2GEJ103	M 10KOHM, J,0.063W	1	
R4575	ERJ2GEJ472	M 4.7KOHM, J,0.063W	1	
R4577-79	ERJ2GEJ222	M 2.2KOHM, J,0.063W	3	
R4583,84	ERJ2GEJ390	M 39 OHM, J,0.063W	2	
R4589-04	ERJ2GEJ2R7X	M 2.7OHM, J,0.063W	16	
R4605,06	ERJ2GEJ103	M 10KOHM, J,0.063W	2	
R4607	ERJ2GEJ220	M 22 OHM, J,0.063W	1	
R4609,10	ERJ2GEJ103	M 10KOHM, J,0.063W	2	
R4612,13	ERJ2GEJ472	M 4.7KOHM, J,0.063W	2	
R4617,18	ERJ2GEJ472	M 4.7KOHM, J,0.063W	2	
R4619	ERJ2GEJ473	M 47KOHM,J,0.063W	1	
R4620	ERJ2GEJ560	M 56 OHM, J,0.063W	1	
R4621	ERJ2GEJ473	M 47KOHM,J,0.063W	1	
R4622	ERJ2GEJ560	M 56 OHM, J,0.063W	1	
R4624	ERJ2GEJ560	M 56 OHM, J,0.063W	1	
R4626	ERJ2GEJ560	M 56 OHM, J,0.063W	1	
R4628	ERJ2GEJ103	M 10KOHM, J,0.063W	1	
R4629-32	ERJ2GEJ472	M 4.7KOHM, J,0.063W	4	
R4633,34	ERJ2GEJ220	M 22 OHM, J,0.063W	2	
R4636	ERJ2GEJ103	M 10KOHM, J,0.063W	1	
R4637	ERJ2GEJ330	M 33 OHM, J,0.063W	1	
R4639	ERJ2GEJ103	M 10KOHM, J,0.063W	1	
R4640	ERJ2GEJ220	M 22 OHM, J,0.063W	1	
R4641	EXB28V330J	RESISTOR ARRAY	1	
R4642-45	ERJ2GEJ220	M 22 OHM, J,0.063W	4	
R4647	ERJ2GEJ220	M 22 OHM, J,0.063W	1	
R4648	ERJ2GEJ330	M 33 OHM, J,0.063W	1	
R4655	ERJ2GEJ330	M 33 OHM, J,0.063W	1	
R4657	ERJ2GEJ182	M 1.8KOHM, J,0.063W	1	
R4658	ERJ2GEJ220	M 22 OHM, J,0.063W	1	
R4660	ERJ2GEJ220	M 22 OHM, J,0.063W	1	
R4661	ERJ2GEJ472	M 4.7KOHM, J,0.063W	1	
R4662	ERJ2GEJ220	M 22 OHM, J,0.063W	1	
R4665	EXB2HV220JV	RESISTOR ARRAY	1	
R4667	EXB2HV220JV	RESISTOR ARRAY	1	
R4668	ERJ2GEJ680	M 68 OHM, J,0.063W	1	
R4669	EXB2HV220JV	RESISTOR ARRAY	1	
R4672,73	ERJ2GEJ103	M 10KOHM, J,0.063W	2	
R4675	ERJ3EKF1802	M 18KOHM, 1/16W	1	
R4677	ERJ3EKF1802	M 18KOHM, 1/16W	1	
R4679,80	ERJ3EKF2202	M 22KOHM, 1/16W	2	
R4681,82	ERJ3EKF3302	M 33KOHM, 1/16W	2	
R4701	ERJ2GEJ680	M 68 OHM, J,0.063W	1	
R4706	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R4708,09	ERJ2GEJ680	M 68 OHM, J,0.063W	2	
R4710	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R4711	ERJ2GEJ103	M 10KOHM, J,0.063W	1	
R4712	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R4713,14	EXB2HV221JV	RESISTOR ARRAY	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R4715	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R4718-20	ERJ2GEJ680	M 68 OHM, J,0.063W	3	
R4727	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R4729,30	ERJ3EKF1000	M 100 OHM, 1/16W	2	
R4731	ERJ3EKF1001	M 1KOHM, 1/16W	1	
R4732	ERJ3EKF4751	M4.75KOHM, 1/16W	1	
R4733	ERJ3EKF75R0	M 0.75HM, 1/16W	1	
R4735	ERJ3EKF2001	M 2KOHM, 1/16W	1	
R4737	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R4738,39	ERJ2GEJ332	M 3.3KOHM, J,0.063W	2	
R4743-47	ERJ2GEJ680	M 68 OHM, J,0.063W	5	
R4749,50	EXB2HV680J	RESISTOR ARRAY	2	
R4751-54	ERJ2GEJ220	M 22 OHM, J,0.063W	4	
R4756-60	ERJ2GEJ680	M 68 OHM, J,0.063W	5	
R4762	EXB2HV680J	RESISTOR ARRAY	1	
R4763-65	ERJ2GE0R00	M 0.0 OHM, J,0.063W	3	
R4772	EXB2HV470JV	RESISTOR ARRAY	1	
R4773	ERJ2GEJ470	M 47 OHM, J,0.063W	1	
R4774	EXB2HV470JV	RESISTOR ARRAY	1	
R4775	ERJ2GEJ470	M 47 OHM, J,0.063W	1	
R4776	EXB2HV470JV	RESISTOR ARRAY	1	
R4777	ERJ2GEJ470	M 47 OHM, J,0.063W	1	
R4778	EXB2HV470JV	RESISTOR ARRAY	1	
R4779	ERJ2GEJ470	M 47 OHM, J,0.063W	1	
R4782	ERJ2GEJ220	M 22 OHM, J,0.063W	1	
R4783	ERJ2GEJ472	M 4.7KOHM, J,0.063W	1	
R4784	ERJ2GEJ220	M 22 OHM, J,0.063W	1	
R4785	ERJ2GEJ472	M 4.7KOHM, J,0.063W	1	
R4788	EXB2HV470JV	RESISTOR ARRAY	1	
R4791,92	ERJ2GEJ470	M 47 OHM, J,0.063W	2	
R4793,94	ERJ2GEJ220	M 22 OHM, J,0.063W	2	
R4796	EXB2HV470JV	RESISTOR ARRAY	1	
R4804	ERJ2GEJ101	M 100 OHM, J,0.063W	1	
R4805,06	ERJ3EKF1001	M 1KOHM, 1/16W	2	
R4807-11	ERJ2GE0R00	M 0.0 OHM, J,0.063W	5	
R4814	ERJ2GEJ103	M 10KOHM, J,0.063W	1	
R4816,17	ERJ2GEJ223	M 22KOHM, J,0.063W	2	
R4819	ERJ2GEJ223	M 22KOHM, J,0.063W	1	
R4822	ERJ2GEJ103	M 10KOHM, J,0.063W	1	
R4823-25	J0JAD0000025	CHIP INDUCTOR	3	
R4837	ERJ2GEJ220	M 22 OHM, J,0.063W	1	
R4838	ERJ2GEJ112	M 1.1KOHM, J,0.063W	1	
R4891	ERJ2GE0R00	M 0.0 OHM, J,0.063W	1	
R4898	ERJ2GEJ103	M 10KOHM, J,0.063W	1	
R4960	EXB2HV680J	RESISTOR ARRAY	1	
R4961-63	ERJ2GEJ680	M 68 OHM, J,0.063W	3	
R4964	EXB2HV680J	RESISTOR ARRAY	1	
R4965,66	ERJ2GEJ680	M 68 OHM, J,0.063W	2	
R4967	EXB2HV680J	RESISTOR ARRAY	1	
R4968-72	ERJ2GEJ680	M 68 OHM, J,0.063W	5	
R5601	ERJ3EKF1800	M 180 OHM, 1/16W	1	
R5603	ERJ3EKF1542	M15.4KOHM, 1/16W	1	
R5605	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R5606	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R5607	ERJ3EKF4531	M4.53KOHM, 1/16W	1	
R5609	ERJ3EKF2000	M 200 OHM, 1/16W	1	
R5611	ERJ6ENF8202	M 82KOHM, 1/10W	1	
R5612	ERJ6ENF1602	M 16KOHM, 1/10W	1	
R5615	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	
R5617	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R5619	ERJ3GEYJ333	M 33KOHM,J,1/16W	1	
R5620	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R5621	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R5625-27	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	3	
R5632	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R5633	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R5634	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R5635	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R5637,38	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R5639	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R5640	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R5641	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R5642	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R5643	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R5644	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R5645	ERJ3EKF2201	M 2.2KOHM, 1/16W	1	
R5646	ERJ3EKF4701	M 4.7KOHM, 1/16W	1	
R5647	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R5648	ERJ3GEYJ392	M 3.9KOHM,J,1/16W	1	
R5649	ERJ3GEYJ104	M 100KOHM,J,1/16W	1	
R5650	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R5652	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R5653,54	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R5659	ERJ3EKF4700	M 470 OHM, 1/16W	1	
R5660	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R5662	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R5664	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R5665	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R5667-69	ERJ3GEYJ473	M 47KOHM,J,1/16W	3	
R5672	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R5676	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R5692	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R5693	ERJ3GEYJ333	M 33KOHM,J,1/16W	1	
R5694	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R5695	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R5801	ERJ3EKF8450	M 845 OHM, 1/16W	1	
R5802	ERJ3EKF1302	M 23KOHM, 1/16W	1	
R5803	ERJ3EKF2001	M 2KOHM, 1/16W	1	
R5804	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R5805-08	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	4	
R5809	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R5822-24	ERJ3GEYJ101	M 100 OHM,J,1/16W	3	
R5826	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R5836	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R6001-06	ERJ14YJ150U	M 15 OHM, J,1/4W	6	
R6020	ERG2FJS101D	M 100 OHM, J, 2W	1	
R6021	ERJ14YJ150U	M 15 OHM, J,1/4W	1	
R6022	ERG2FJS101D	M 100 OHM, J, 2W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R6023-27	ERJ14YJ150U	M 15 OHM, J,1/4W	5	
R6031,32	ERJ6ENF8202	M 82KOHM, 1/10W	2	
R6033	ERJ6ENF5602	M 56KOHM, 1/10W	1	
R6034	ERJ6ENF2702	M 27KOHM, 1/10W	1	
R6041-46	ERJ14YJ100	M 10 OHM, J,1/4W	6	
R6053-56	ERJ14YJ100	M 10 OHM, J,1/4W	4	
R6061,62	ERJ6GEYJ224	M 220KOHM,J,1/10W	2	
R6102	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R6104	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R6106	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R6108	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R6109	ERJ6GEYJ100	M 10 OHM,J,1/10W	1	
R6110	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6111,12	ERJ6GEYJ470	M 47 OHM,J,1/10W	2	
R6113	ERJ14YJ224	M 220KOHM, J,1/4W	1	
R6114	ERJ6GEYJ470	M 47 OHM,J,1/10W	1	
R6116	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6131,32	ERJ6GEYJ101	M 100 OHM,J,1/10W	2	
R6133,34	ERJ6GEYJ151	M 150 OHM,J,1/10W	2	
R6135,36	ERJ6GEYJ100	M 10 OHM,J,1/10W	2	
R6141,42	ERJ6GEYJ103	M 10KOHM,J,1/10W	2	
R6146,47	ERJ6GEYJ103	M 10KOHM,J,1/10W	2	
R6151,52	ERJ6GEYJ101	M 100 OHM,J,1/10W	2	
R6153,54	ERJ6GEYJ151	M 150 OHM,J,1/10W	2	
R6155,56	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
R6157-60	D0GF1R0JA047	M 1.0 OHM,J, 0.33W	4	
R6171	ERJ6GEYJ100	M 10 OHM,J,1/10W	1	
R6172,73	ERJ6GEYJ103	M 10KOHM,J,1/10W	2	
R6181	ERJ6GEYJ100	M 10 OHM,J,1/10W	1	
R6182,83	ERJ6GEYJ103	M 10KOHM,J,1/10W	2	
R6191-94	ERJ6GEYJ101	M 100 OHM,J,1/10W	4	
R6195,96	ERJ6GEYJ104	M 100KOHM,J,1/10W	2	
R6213	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R6214	D0GD151JA036	M 150 OHM,J,0.25W	1	
R6220	ERDS2TC0	C 0 OHM, 1/4W	1	
R6222	ERG1FJS103D	M 10KOHM, J, 1W	1	
R6223	ERG2FJS123D	M 12KOHM, J, 2W	1	
R6225	ERJ6GEYJ203	M 20KOHM,J,1/10W	1	
R6226,27	ERJ6GEYJ163	M 16KOHM,J,1/10W	2	
R6228	ERJ6GEYJ562	M 5.6KOHM,J,1/10W	1	
R6229	ERJ6GEYJ163	M 16KOHM,J,1/10W	1	
R6230	ERDS2TC0	C 0 OHM, 1/4W	1	
R6231	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R6232	ERJ6ENF1201	M 1.2KOHM, 1/10W	1	
R6241	EXB38V470J	RESISTOR ARRAY	1	
R6242	EXB38V472J	RESISTOR ARRAY	1	
R6243	EXB38V470J	RESISTOR ARRAY	1	
R6244	EXB38V472J	RESISTOR ARRAY	1	
R6251	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6252,53	ERJ6ENF3902	M 39KOHM, 1/10W	2	
R6254	ERJ6ENF8201	M 8.2KOHM, 1/10W	1	
R6255	ERJ6ENF1201	M 1.2KOHM, 1/10W	1	
R6256	ERJ6ENF1501	M 1.5KOHM, 1/10W	1	
R6257	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R6258	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R6261	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R6401-06	ERJ14YJ150U	M 15 OHM, J,1/4W	6	
R6421-26	ERJ14YJ150U	M 15 OHM, J,1/4W	6	
R6441-46	ERJ14YJ100	M 10 OHM, J,1/4W	6	
R6453-56	ERJ14YJ100	M 10 OHM, J,1/4W	4	
R6465	ERJ6ENF2702	M 27KOHM, 1/10W	1	
R6466	ERJ6ENF5602	M 56KOHM, 1/10W	1	
R6467,68	ERJ6ENF8202	M 82KOHM, 1/10W	2	
R6471	ERJ6GEYJ392	M 3.9KOHM,J,1/10W	1	
R6472	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R6473	ERJ6GEYJ561	M 560 OHM,J,1/10W	1	
R6474	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R6475,76	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	2	
R6477	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R6478	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R6479	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R6501,02	ERJ6GEYJ101	M 100 OHM,J,1/10W	2	
R6503	ERJ6GEYJ100	M 10 OHM,J,1/10W	1	
R6504,05	ERJ6GEYJ151	M 150 OHM,J,1/10W	2	
R6506	ERJ6GEYJ100	M 10 OHM,J,1/10W	1	
R6507-09	D0GF1R0JA047	M 1.0 OHM,J, 0.33W	3	
R6511,12	ERJ6GEYJ103	M 10KOHM,J,1/10W	2	
R6516,17	ERJ6GEYJ103	M 10KOHM,J,1/10W	2	
R6521,22	ERJ6GEYJ101	M 100 OHM,J,1/10W	2	
R6523,24	ERJ6GEYJ151	M 150 OHM,J,1/10W	2	
R6525,26	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
R6531	ERJ6GEYJ100	M 10 OHM,J,1/10W	1	
R6532,33	ERJ6GEYJ103	M 10KOHM,J,1/10W	2	
R6551	ERJ6GEYJ100	M 10 OHM,J,1/10W	1	
R6552,53	ERJ6GEYJ103	M 10KOHM,J,1/10W	2	
R6561-64	EXB38V470J	RESISTOR ARRAY	4	
R6565-68	EXB38V472J	RESISTOR ARRAY	4	
R6581	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6582,83	ERJ6ENF3902	M 39KOHM, 1/10W	2	
R6584	ERJ6ENF1002	M 10KOHM, 1/10W	1	
R6585	ERJ6ENF1201	M 1.2KOHM, 1/10W	1	
R6586	ERJ6ENF1801	M 1.8KOHM, 1/10W	1	
R6587	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R6588	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6590	ERJ6GEYJ221	M 220 OHM,J,1/10W	1	
R6591	EXB38V472J	RESISTOR ARRAY	1	
R6592	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R6603	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R6604	D0GD151JA036	M 150 OHM,J,0.25W	1	
R6605	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R6606	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R6607	ERJ6ENF5361	M5.36KOHM, 1/10W	1	
R6608,09	D0GF102JA047	M 1.0 KOHM,J,0.33W	2	
R6610	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R6611	ERJ6GEYJ105	M 1MOHM,J,1/10W	1	
R6612	ERJ6GEYJ470	M 47 OHM,J,1/10W	1	
R6613	ERJ6GEYJ105	M 1MOHM,J,1/10W	1	
R6620	D0D28R2JA021	M 8.2 OHM,J,5W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R6621,22	ERJ6GEYJ221	M 220 OHM,J,1/10W	2	
R6641-45	ERJ6GEYJ100	M 10 OHM,J,1/10W	5	
R6647,48	ERJ6GEYJ100	M 10 OHM,J,1/10W	2	
R6658	D0D1101JA009	M 100 OHM,J,1W	1	
R6659,60	ERJ6GEYJ224	M 220KOHM,J,1/10W	2	
R6661	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R6662	ERJ6ENF3001	M 3KOHM, 1/10W	1	
R6663	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6664	D0GF222JA047	M 2.2 KOHM,J,0.33W	1	
R6665	ERJ14YJ470	M 47 OHM,J, 1/2W	1	
R6666	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R6667,68	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	2	
R6671	ERJ6GEYJ470	M 47 OHM,J,1/10W	1	
R6672	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6673-75	D0GD5R6JA059	M 5.6 OHM,J,0.25W	3	
R6682	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R6683	D0GD151JA036	M 150 OHM,J,0.25W	1	
R6684	ERJ6GEYJ100	M 10 OHM,J,1/10W	1	
R6685	ERJ6GEYJ471	M 470 OHM,J,1/10W	1	
R6686	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6687	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R6688	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R6689	ERJ6GEYJ100	M 10 OHM,J,1/10W	1	
R6690	ERJ6GEYJ151	M 150 OHM,J,1/10W	1	
R6691	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6696,97	D0D32R2JA020	M 2.2 OHM,J,5W	2	
R6700-08	ERJ6GEYJ471	M 470 OHM,J,1/10W	9	
R6710-18	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	9	
R6721,22	EXB38V220J	RESISTOR ARRAY	2	
R6723	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R6724	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R6742	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6743	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R6744	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6745	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R6746,47	ERJ6GEYJ103	M 10KOHM,J,1/10W	2	
R6755	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R6756-58	D0GD101JA059	M 100 OHM,J,0.25W	3	
R6759	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R6760	ERJ6GEYJ122	M 1.2KOHM,J,1/10W	1	
R6761	ERJ6GEYJ100	M 10 OHM,J,1/10W	1	
R6762	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6775,76	ERJ6GEYJ101	M 100 OHM,J,1/10W	2	
R6777	D0GD151JA036	M 150 OHM,J,0.25W	1	
R6781	ERJ6GEYJ470	M 47 OHM,J,1/10W	1	
R6782	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6791	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R6792	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6793	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R6801	ERX3FJS8R2D	M 8.2 OHM, J, 3W	1	
R6802	ERG2FJS683D	M 68KOHM, J, 2W	1	
R6803	ERG2FJS563D	M 56KOHM, J, 2W	1	
R6806,07	ERX12SJ1R2	M 1.2 OHM, J,1/2W	2	
R6808	ERJ6GEYJ272	M 2.7KOHM,J,1/10W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R6809	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6810,11	ERJ6GEYJ433	M 43KOHM,J,1/10W	2	
R6812	ERJ6ENF2403	M 240KOHM, 1/10W	1	
R6813	ERJ6ENF9101	M 9.1KOHM, 1/10W	1	
R6814	ERJ6ENF5601	M 5.6KOHM, 1/10W	1	
R6816	ERJ6ENF2202	M 2.2KOHM, 1/10W	1	
R6817	ERJ6ENF1002	M 10KOHM, 1/10W	1	
R6819	ERJ6GEYJ681	M 680 OHM,J,1/10W	1	
R6820	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R6821	ERG2FJS221D	M 220 OHM, J, 2W	1	
R6822	ERJ12YJ104U	M 100KOHM, 1/2W	1	
R6823	ERG1FJS104D	M 100KOHM, J, 1W	1	
R6824	ERJ6GEYJ562	M 5.6KOHM,J,1/10W	1	
R6825,26	ERJ6ENF2703	M 270KOHM, 1/10W	2	
R6827	ERJ6ENF2702	M 27KOHM, 1/10W	1	
R6828	ERJ6ENF5101	M 5.1KOHM, 1/10W	1	
R6829,30	ERJ6GEYJ224	M 220KOHM,J,1/10W	2	
R6831	ERJ6GEYJ153	M 15KOHM,J,1/10W	1	
R6832	ERDS1FJ4R7	C 4.7 OHM, J,1/2W	1	
R6833-36	ERJ6ENF5602	M 56KOHM, 1/10W	4	
R6837	ERJ6ENF5102	M 51KOHM, 1/10W	1	
R6839	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R6841	ERJ12YJ153U	M 15KOHM, 1/2W	1	
R6842	ERJ14YJ433U	M 43KOHM, 1/2W	1	
R6843	ERJ6GEYJ513	M 51KOHM,J,1/10W	1	
R6844	ERG2FJS101D	M 100 OHM, J, 2W	1	
R6845	ERJ6GEYJ513	M 51KOHM,J,1/10W	1	
R6846,47	ERJ6GEYJ563	M 56KOHM,J,1/10W	2	
R6848	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6849,50	ERJ6ENF6802	M 68KOHM, 1/10W	2	
R6851	ERJ6ENF1201	M 1.2KOHM, 1/10W	1	
R6852	ERJ6ENF2491	M2.49KOHM, 1/10W	1	
R6853	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R6858	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R6860	D0D28R2JA021	M 8.2 OHM,J,5W	1	
R6861	ERJ6ENF3902	M 39KOHM, 1/10W	1	
R6862,63	ERJ6ENF4702	M 47KOHM, 1/10W	2	
R6864	ERJ6ENF9101	M 9.1KOHM, 1/10W	1	
R6865,66	ERJ6ENF2201	M 2.2KOHM, 1/10W	2	
R6867	ERJ6GEYJ392	M 3.9KOHM,J,1/10W	1	
R6868	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R6869	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R6871-73	ERJ6ENF3902	M 39KOHM, 1/10W	3	
R6874	ERJ6ENF8201	M 8.2KOHM, 1/10W	1	
R6875	ERJ6ENF3301	M 3.3KOHM, 1/10W	1	
R6876	ERJ6ENF1201	M 1.2KOHM, 1/10W	1	
R6877	ERJ6GEYJ392	M 3.9KOHM,J,1/10W	1	
R6878	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R6879	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R6886-88	ERJ6GEYJ224	M 220KOHM,J,1/10W	3	
R6891	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	1	
R6901	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R6902-04	ERJ3GEY0R00	M 0 OHM, 1/16W	3	
R6905	ERJ6GEYJ221	M 220 OHM,J,1/10W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R6909	ERJ6GEYJ221	M 220 OHM,J,1/10W	1	
R6913	ERJ6GEYJ221	M 220 OHM,J,1/10W	1	
R6917	ERJ6GEYJ221	M 220 OHM,J,1/10W	1	
R6924	ERJ6GEYJ221	M 220 OHM,J,1/10W	1	
R6931-34	ERJ6GEYJ103	M 10KOHM,J,1/10W	4	
R6935,36	ERJ8GEYJ224	M 220KOHM, J,1/8W	2	
R6951	ERJ6GEYJ221	M 220 OHM,J,1/10W	1	
R6955	ERJ6GEYJ221	M 220 OHM,J,1/10W	1	
R6959	ERJ6GEYJ221	M 220 OHM,J,1/10W	1	
R6963	ERJ6GEYJ221	M 220 OHM,J,1/10W	1	
R6967	ERJ6GEYJ221	M 220 OHM,J,1/10W	1	
R6971	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R6972-74	ERJ3GEY0R00	M 0 OHM, 1/16W	3	
R6981-84	ERJ6GEYJ103	M 10KOHM,J,1/10W	4	
R6985,86	ERJ8GEYJ224	M 220KOHM, J,1/8W	2	
R7103-06	ERJ12YJ6R8U	M 6.8 OHM, J,1/2W	4	
R7108	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7110	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7113-16	ERJ12YJ6R8U	M 6.8 OHM, J,1/2W	4	
R7118	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7120	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7123-26	ERJ12YJ6R8U	M 6.8 OHM, J,1/2W	4	
R7128	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7130	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7131	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R7132	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R7133	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R7134	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R7135	EXB38V471J	RESISTOR ARRAY	1	
R7136-39	ERJ3GEYJ220	M 22 OHM,J,1/16W	4	
R7140-42	ERJ3GEYJ470	M 47 OHM,J,1/16W	3	
R7201	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R7203-05	ERJ12YJ6R8U	M 6.8 OHM, J,1/2W	3	
R7207	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R7209,10	ERJ3GEYJ470	M 47 OHM,J,1/16W	2	
R7211-13	EXB38V471J	RESISTOR ARRAY	3	
R7215,16	EXB38V470J	RESISTOR ARRAY	2	
R7221-25	ERJ12YJ6R8U	M 6.8 OHM, J,1/2W	5	
R7228,29	ERJ3GEYJ470	M 47 OHM,J,1/16W	2	
R7234,35	ERJ12YJ6R8U	M 6.8 OHM, J,1/2W	2	
R7238,39	ERJ12YJ6R8U	M 6.8 OHM, J,1/2W	2	
R7240	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7241-44	EXB38V471J	RESISTOR ARRAY	4	
R7245	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7246-49	EXB38V471J	RESISTOR ARRAY	4	
R7250-53	ERJ12YJ6R8U	M 6.8 OHM, J,1/2W	4	
R7254	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7256	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7257-60	ERJ3GEYJ220	M 22 OHM,J,1/16W	4	
R7261-63	ERJ3GEYJ470	M 47 OHM,J,1/16W	3	
R7264-71	EXB38V470J	RESISTOR ARRAY	8	
R7274-79	EXB38V471J	RESISTOR ARRAY	6	
R7280-85	EXB38V470J	RESISTOR ARRAY	6	
R7301-08	EXB38V470J	RESISTOR ARRAY	8	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R7309	EXB38V471J	RESISTOR ARRAY	1	
R7326-29	ERJ3GEYJ220	M 22 OHM,J,1/16W	4	
R7330,31	ERJ3GEYJ470	M 47 OHM,J,1/16W	2	
R7332	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7333,34	ERJ3GEYJ470	M 47 OHM,J,1/16W	2	
R7335,36	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R7337-44	ERJ12YJ6R8U	M 6.8 OHM, J,1/2W	8	
R7345-48	ERJ3GEY0R00	M 0 OHM, 1/16W	4	
R7349-56	ERJ12YJ6R8U	M 6.8 OHM, J,1/2W	8	
R7357,58	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R7359	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R7360	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R7361	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R7362-69	EXB38V471J	RESISTOR ARRAY	8	
R7403-06	ERJ12YJ6R8U	M 6.8 OHM, J,1/2W	4	
R7408	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7410	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7413-16	ERJ12YJ6R8U	M 6.8 OHM, J,1/2W	4	
R7418	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7420	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7423-26	ERJ12YJ6R8U	M 6.8 OHM, J,1/2W	4	
R7428	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7430	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7433-36	ERJ12YJ6R8U	M 6.8 OHM, J,1/2W	4	
R7438	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7440	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7441-44	ERJ3GEYJ220	M 22 OHM,J,1/16W	4	
R7445	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R7446-49	ERJ3GEYJ470	M 47 OHM,J,1/16W	4	
R7450-57	EXB38V470J	RESISTOR ARRAY	8	
R7459	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R7460	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R7461	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R7462-70	EXB38V681J	RESISTOR ARRAY	9	
R7501,02	EXB38V681J	RESISTOR ARRAY	2	
R7503	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R7504,05	EXB38V470J	RESISTOR ARRAY	2	
R7510-13	ERJ12YJ6R8U	M 6.8 OHM, J,1/2W	4	
R7514	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R7515	EXB38V681J	RESISTOR ARRAY	1	
R7516-19	ERJ12YJ6R8U	M 6.8 OHM, J,1/2W	4	
R7520	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7521-24	ERJ12YJ6R8U	M 6.8 OHM, J,1/2W	4	
R7525	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7526-33	EXB38V681J	RESISTOR ARRAY	8	
R7535	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R7536	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R7537	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R7538	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7541-43	ERJ3GEYJ220	M 22 OHM,J,1/16W	3	
R7544-46	ERJ3GEYJ470	M 47 OHM,J,1/16W	3	
R7547-54	EXB38V470J	RESISTOR ARRAY	8	
R7555	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R7556-59	ERJ12YJ6R8U	M 6.8 OHM, J,1/2W	4	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R7560	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R7575	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R7577	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7580-85	EXB38V681J	RESISTOR ARRAY	6	
R7586-91	EXB38V470J	RESISTOR ARRAY	6	
R7603-06	ERJ12YJ6R8U	M 6.8 OHM, J,1/2W	4	
R7608	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7610	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7613-16	ERJ12YJ6R8U	M 6.8 OHM, J,1/2W	4	
R7618	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7620	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7623-26	ERJ12YJ6R8U	M 6.8 OHM, J,1/2W	4	
R7628	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7630	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7631	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R7632	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R7633	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R7634	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R7635-38	ERJ3GEYJ220	M 22 OHM,J,1/16W	4	
R7639-41	ERJ3GEYJ470	M 47 OHM,J,1/16W	3	
R7642	EXB38V681J	RESISTOR ARRAY	1	
R9060-67	ERJ3GEYJ101	M 100 OHM,J,1/16W	8	
R9074	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R9076	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R9095	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9097	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9099	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R9100,01	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R9102	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R9106	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9107	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	1	
R9108,09	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R9110,11	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	
R9113	ERJ3GEYJ100	M 10 OHM,J,1/16W	1	
R9120	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R9121	ERJ3GEYJ104	M 100KOHM,J,1/16W	1	
R9127	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9129	ERJ3GEYJ683	M 68KOHM,J,1/16W	1	
R9134	ERJ3GEYJ333	M 33KOHM,J,1/16W	1	
R9140	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R9141-45	ERJ3GEYJ101	M 100 OHM,J,1/16W	5	
R9148	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9149	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R9150,51	ERJ3GEYJ220	M 22 OHM,J,1/16W	2	
R9152,53	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	2	
R9154,55	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	2	
R9156-59	ERJ3GEYJ103	M 10KOHM,J,1/16W	4	
R9160,61	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R9164-66	ERJ3GEYJ103	M 10KOHM,J,1/16W	3	
R9167,68	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	
R9169	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9170-72	ERJ3GEYJ393	M 39KOHM,J,1/16W	3	
R9173-75	ERJ3GEYJ103	M 10KOHM,J,1/16W	3	
R9178	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R9179	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R9180	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9181-84	ERJ3GEYJ101	M 100 OHM,J,1/16W	4	
R9185,86	ERJ3GEYJ220	M 22 OHM,J,1/16W	2	
R9187,88	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	2	
R9189,90	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R9192	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9193	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9194	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9196	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9198	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R9199	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	1	
R9201,02	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	2	
R9203	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R9204,05	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	2	
R9206,07	ERJ3GEYJ102	M 1KOHM,J,1/16W	2	
R9209	ERJ3GEYJ100	M 10 OHM,J,1/16W	1	
R9210	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	1	
R9215	ERJ3GEYJ123	M 12KOHM,J,1/16W	1	
R9217-22	ERJ3GEYJ103	M 10KOHM,J,1/16W	6	
R9236	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9237	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9244,45	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	
R9247,48	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	2	
R9300,01	ERJ3GEYJ820	M 82 OHM,J,1/16W	2	
R9302,03	D1HG8208A002	NETWORK RESISTER	2	
R9304,05	ERJ3GEYJ220	M 22 OHM,J,1/16W	2	
R9306,07	EXB38V820J	RESISTOR ARRAY	2	
R9308	D1HG8208A002	NETWORK RESISTER	1	
R9309,10	ERJ3GEYJ220	M 22 OHM,J,1/16W	2	
R9311,12	ERJ3GEYJ820	M 82 OHM,J,1/16W	2	
R9313,14	D1HG8208A002	NETWORK RESISTER	2	
R9315,16	ERJ3GEYJ220	M 22 OHM,J,1/16W	2	
R9318	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R9319	ERJ3GEYJ104	M 100KOHM,J,1/16W	1	
R9320	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9367	ERJ3GEYJ181	M 180 OHM,J,1/16W	1	
R9371	EXB2HV470JV	RESISTOR ARRAY	1	
R9372	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R9373	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R9374	EXB38V470J	RESISTOR ARRAY	1	
R9375	ERJ3GEYJ151	M 150 OHM,J,1/16W	1	
R9389-91	ERJ3GEYJ103	M 10KOHM,J,1/16W	3	
R9393-95	D1HG8208A002	NETWORK RESISTER	3	
R9396,97	ERJ3GEYJ220	M 22 OHM,J,1/16W	2	
R9398	EXB38V820J	RESISTOR ARRAY	1	
R9404	EXB2HV470JV	RESISTOR ARRAY	1	
R9412-21	EXB38V470J	RESISTOR ARRAY	10	
R9428	EXB38V103J	RESISTOR ARRAY	1	
R9430	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9433	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9437,38	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R9440	EXB2HV470JV	RESISTOR ARRAY	1	
R9441	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R9442	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9443	ERJ3GEYJ104	M 100KOHM,J,1/16W	1	
R9444	D1HG8208A002	NETWORK RESISTER	1	
R9445	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R9446	EXB38V820J	RESISTOR ARRAY	1	
R9448	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R9449,50	D1HG8208A002	NETWORK RESISTER	2	
R9451,52	ERJ3GEYJ220	M 22 OHM,J,1/16W	2	
R9453-57	D1HG8208A002	NETWORK RESISTER	5	
R9458,59	ERJ3GEYJ820	M 82 OHM,J,1/16W	2	
R9460,61	ERJ3GEYJ220	M 22 OHM,J,1/16W	2	
R9462,63	EXB38V820J	RESISTOR ARRAY	2	
R9464,65	ERJ3GEYJ220	M 22 OHM,J,1/16W	2	
R9466,67	ERJ3GEYJ820	M 82 OHM,J,1/16W	2	
R9468	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R9469	ERJ3GEYJ104	M 100KOHM,J,1/16W	1	
R9470	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R9471	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9472	ERJ3GEYJ104	M 100KOHM,J,1/16W	1	
R9475	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9480	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9482-85	ERJ3EKF1001	M 1KOHM, 1/16W	4	
R9486	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R9487	ERJ3GEYJ151	M 150 OHM,J,1/16W	1	
R9488	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R9489-95	ERJ3GEYJ470	M 47 OHM,J,1/16W	7	
R9496	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9497	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R9498	ERJ3GEYJ104	M 100KOHM,J,1/16W	1	
R9506	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R9507	ERJ3GEYJ560	M 56 OHM,J,1/16W	1	
R9512	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9514	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9515	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R9522-25	ERJ3GEYJ103	M 10KOHM,J,1/16W	4	
R9527,28	EXB2HV272JV	RESISTOR ARRAY	2	
R9529,30	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R9531-33	ERJ3GEYJ470	M 47 OHM,J,1/16W	3	
R9534	EXB38V470J	RESISTOR ARRAY	1	
R9535,36	ERJ3GEYJ470	M 47 OHM,J,1/16W	2	
R9537	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9539	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9542	ERJ3GEYJ680	M 68 OHM,J,1/16W	1	
R9543,44	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R9545	ERJ3GEYJ304V	M 300KOHM,J,1/16W	1	
R9546	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9548-50	ERJ3GEYJ103	M 10KOHM,J,1/16W	3	
R9552-54	ERJ3GEYJ470	M 47 OHM,J,1/16W	3	
R9556	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9560	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9574	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9578	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9580-83	ERJ3EKF1001	M 1KOHM, 1/16W	4	
R9584	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R9585,86	ERJ3GEYJ470	M 47 OHM,J,1/16W	2	
R9587-95	EXB38V470J	RESISTOR ARRAY	9	
R9596-99	ERJ3GEYJ470	M 47 OHM,J,1/16W	4	
R9602	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9616	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9619,20	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	2	
R9622	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9624,25	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R9628	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9630	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9631	EXB2HV272JV	RESISTOR ARRAY	1	
R9632-34	ERJ3GEYJ470	M 47 OHM,J,1/16W	3	
R9637	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R9639	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R9641	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R9643	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9645	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9800	ERJ3EKF1302	M 23KOHM, 1/16W	1	
R9801	ERJ3EKF2402	M 24KOHM, 1/16W	1	
R9802	ERJ3EKF6202	M 62KOHM, 1/16W	1	
R9803	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9804	ERJ3EKF2402	M 24KOHM, 1/16W	1	
R9805	ERJ3EKF3002	M 30KOHM, 1/16W	1	
R9806	ERJ3EKF3902	M 39KOHM, 1/16W	1	
R9807	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9808	ERJ3GEYJ104	M 100KOHM,J,1/16W	1	
R9810	ERJ3EKF3001	M 3KOHM, 1/16W	1	
R9813	ERJ3EKF2401	M 2.4KOHM, 1/16W	1	
R9814	ERJ3EKF6802	M 68KOHM, 1/16W	1	
R9815	ERJ3EKF2202	M 22KOHM, 1/16W	1	
R9816	ERJ3EKF8202	M 82KOHM, 1/16W	1	
R9821	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9823-28	ERJ3GEYJ101	M 100 OHM,J,1/16W	6	
R9830,31	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R9838,39	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	
R9840	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R9842-44	ERJ3GEYJ101	M 100 OHM,J,1/16W	3	
R9845	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	1	
R9846,47	EXB2HV272JV	RESISTOR ARRAY	2	
R9848,49	EXB2HV470JV	RESISTOR ARRAY	2	
R9850	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R9854	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R9859	EXB38V101J	RESISTOR ARRAY	1	
R9864,65	ERJ3GEYJ102	M 1KOHM,J,1/16W	2	
R9868	ERJ3GEYJ104	M 100KOHM,J,1/16W	1	
R9869-71	ERJ3GEYJ103	M 10KOHM,J,1/16W	3	
R9872	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9875-77	ERJ3GEYJ103	M 10KOHM,J,1/16W	3	
R9878	ERJ3EKF3902	M 39KOHM, 1/16W	1	
R9879	ERJ3EKF2002	M 20KOHM, 1/16W	1	
R9880	ERJ3EKF3602	M 36KOHM, 1/16W	1	
R9883	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9884	ERJ3GEYJ104	M 100KOHM,J,1/16W	1	
R9891	ERJ3EKF4702	M 47KOHM, 1/16W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R9892	ERJ3EKF1502	M 15KOHM, 1/16W	1	
R9893	ERJ3EKF3602	M 36KOHM, 1/16W	1	
R9896	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9897	ERJ3GEYJ104	M 100KOHM,J,1/16W	1	
RM2501	PNA4701M05TV	REMOCO RECEIVER	1	
RTL	TNPA3756CP	CIRCUIT BOARD DG	1	⚠
RTL	TNPA3760AD	CIRCUIT BOARD H	1	⚠
RTL	TNPA3768AC	CIRCUIT BOARD TA	1	⚠
RTL	TNPA3852	CIRCUIT BOARD HC	1	⚠
RTL	TNPA3761AC	CIRCUIT BOARD PA	1	⚠
RTL	ETXMM610MEF	CIRCUIT BOARD P	1	⚠
RTL	TNPA3821	CIRCUIT BOARD C1	1	⚠
RTL	TNPA3822	CIRCUIT BOARD C2	1	⚠
RTL	TNPA3823	CIRCUIT BOARD C3	1	⚠
RTL	TNPA3824	CIRCUIT BOARD C4	1	⚠
RTL	TNPA3825	CIRCUIT BOARD C5	1	⚠
RTL	TNPA3826	CIRCUIT BOARD C6	1	⚠
RTL	TZTNP01BETB	CIRCUIT BOARD D	1	⚠
RTL	TNPA3827	CIRCUIT BOARD SC	1	⚠
RTL	TNPA3832	CIRCUIT BOARD SD	1	⚠
RTL	TNPA3828	CIRCUIT BOARD SS	1	⚠
RTL	TNPA3829	CIRCUIT BOARD SS2	1	⚠
RTL	TNPA3830	CIRCUIT BOARD SS3	1	⚠
RTL	TNPA3831	CIRCUIT BOARD SU	1	⚠
RTL	TNPA3764AF	CIRCUIT BOARD G	1	⚠
RTL	TNPA3848AD	CIRCUIT BOARD GK	1	⚠
RTL	TNPA3762AE	CIRCUIT BOARD K	1	⚠
RTL	TNPA3763AC	CIRCUIT BOARD S	1	⚠
S1	K1KA03BA0061	3P CONNECTOR	1	
SC2	K1KA02A00626	2P CONNECTOR	1	
SC20	K1KA20AA0008	20P CONNECTOR	1	
SC23	K1KA03AA0193	3P CONNECTOR	1	
SC30	K1KA08AA0192	8P CONNECTOR	1	
SC41,42	K1ML80B00001	80P CONNECTOR	2	
SC45,46	K1KA09A00239	9P CONNECTOR	2	
SD1-D4	K1MN96B00006	96P CONNECTOR	4	
SD46	K1KB09A00045	9P CONNECTOR	1	
SS11	K1KA02A00626	2P CONNECTOR	1	
SS12	K1KA10AA0194	10P CONNECTOR	1	
SS20,21	K1KA07A00170	7P CONNECTOR	2	
SS22,23	K1KB07AA0087	7P CONNECTOR	2	
SS33	K1KA04AA0193	4P CONNECTOR	1	
SS34	K1KA03AA0193	3P CONNECTOR	1	
SS43	K1KA12AA0194	12P CONNECTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
SS44	K1KA04AA0193	4P CONNECTOR	1	
SS51-56	K1MN13B00020	13P CONNECTOR	6	
SU1-U4	K1MN96B00006	96P CONNECTOR	4	
SU45	K1KB09A00045	9P CONNECTOR	1	
SW2500	K0F162B00002	SWITCH	1	
SW3753-57	EVQ11G05R	SWITCH	5	
T6602	ETS25AZ149AD	TRANS	1	
TA5,A6	K1KB15B00013	15P CONNECTOR	2	
TU001	ENG37A12GF	TUNER	1	⚠
VR6000	EVMEASA00B14	CONTROL 10KOHMB 0.3W	1	
VR6600	EVMEASA00B13	CONTROL 1KOHMB 0.3W	1	
VR6602	EVMEASA00B53	CONTROL 5KOHMB 0.3W	1	
X1100	H0J100500030	CRYSTAL	1	
X1101	H0J327200114	CRYSTAL	1	
X2101	H0J184500027	CRYSTAL	1	
X4004	H0J270500087	CRYSTAL	1	
X9000	H2D200500011	CRYSTAL	1	
X9500	H0J200500038	CRYSTAL	1	
ZA2101-08	TESA169	SHIELD CLIP	8	
ZA2300,01	K4CZ01000027	COMPATIBLE WITH JALCO K9	2	
ZA3401-03	K4CZ01000027	COMPATIBLE WITH JALCO K9	3	
ZA3405	K4CZ01000027	COMPATIBLE WITH JALCO K9	1	
ZA3701	K4CD01000013	TERMINAL	1	
ZA4001,02	K4CD08000002	TERMINAL	2	
ZA6001-03	K4CD01000011	TERMINAL	3	
ZA6401-03	K4CD01000011	TERMINAL	3	
ZA7101-05	K4CD01000013	TERMINAL	5	
ZA7201-05	K4CD01000013	TERMINAL	5	
ZA7301-05	K4CD01000013	TERMINAL	5	
ZA7401-05	K4CD01000013	TERMINAL	5	
ZA7501-05	K4CD01000013	TERMINAL	5	
ZA7601-05	K4CD01000013	TERMINAL	5	
ZA9001	K4CD01000011	TERMINAL	1	
A101,02	RA362MSV7	ARRESTOR	2	⚠
C101	ECQU2A105ML	P 1UF, 250V	1	⚠
C102	ECQU2A224ML	P 0.22UF, 250V	1	⚠
C103,04	ECKENA101KBR	C 100P 250V	2	⚠
C106,07	MMXC2W105K	C 1P 450V	2	
C108	ECJ2XB1H223K	C 0.022UF, K, 50V	1	
C109	ECJ2FB1H104K	C 0.1UF, K, 50V	1	
C110	ECJ2XC1H471J	C 470PF, J, 50V	1	
C111	ECJ2XB1H102K	C 1000PF, K, 50V	1	
C112	KZE1E470	C 470U 25V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C113	**ECJ2XC1H471J**	**C 470PF, J, 50V**	**1**	
C114	**ECJ2XC1H101J**	**C 100PF, J, 50V**	**1**	
C115	**ECQE6472B45**	**C 4700U 630V**	**1**	
C116,17	**KMQ2W221L**	**C 220U 450V**	**2**	
C118	**ECJ2FB1H104K**	**C 0.1UF, K, 50V**	**1**	
C119	**ECKDNA331KB7**	**C 330PF, Z,**	**1**	⚠
C120	**ECJ2FB1H104K**	**C 0.1UF, K, 50V**	**1**	
C121	**ECJ2XB1H223K**	**C 0.022UF, K, 50V**	**1**	
C122,23	**ECJ2FB1H104K**	**C 0.1UF, K, 50V**	**2**	
C127	**KMQ2W221L**	**C 220U 450V**	**1**	
C128	**TBB106K1A**	**C 10U 10V**	**1**	
C129	**ECJ2FB1H104K**	**C 0.1UF, K, 50V**	**1**	
C201,02	**KZE1E470**	**C 470U 25V**	**2**	
C203,04	**RR3DD101K7**	**C 100P 2KV**	**2**	
C206	**ECWH8473HV**	**P 0.047PF, J, 8KV**	**1**	
C251	**KMQ220901Z**	**C 900U 220V**	**1**	
C253,54	**KMQ220901Z**	**C 900U 220V**	**2**	
C256,57	**ECQE2473SKF**	**C 0.047U 250V**	**2**	
C301	**KZE1E470**	**C 470U 25V**	**1**	
C302,03	**RR3DD101K7**	**C 100P 2KV**	**2**	
C305	**ECWH8183HV**	**C 0.018UF 800V**	**1**	
C306	**KZE1E470**	**C 470U 25V**	**1**	
C351-53	**KZE1E182S**	**C 1800UF 25V**	**3**	
C354,55	**ECQV1H474JL**	**P 0.47UF, J, 50V**	**2**	
C356	**KZE1E821L**	**C 8200UF 25V**	**1**	
C357	**TEB104K5**	**C 0.1UF 50V**	**1**	
C358	**KZE1E331S**	**C 330UF 25V**	**1**	
C359	**TEB104K5**	**C 0.1UF 50V**	**1**	
C360	**KZE1E101**	**C 100UF 25V**	**1**	
C361	**TEB104K5**	**C 0.1UF 50V**	**1**	
C363	**KZE1E821L**	**C 8200UF 25V**	**1**	
C364	**TEB104K5**	**C 0.1UF 50V**	**1**	
C365	**KZE2A270**	**C 27UF 100V**	**1**	
C401	**KZE2A270**	**C 27UF 100V**	**1**	
C402	**KZE2A471S**	**C 470UF 100V**	**1**	
C404,05	**KZE2A471S**	**C 470UF 100V**	**2**	
C501	**ECQU2A473ML**	**P 0.047UF, M,250V**	**1**	⚠
C502,03	**ECJ2FB1H104K**	**C 0.1UF, K, 50V**	**2**	
C504	**KZE1E101**	**C 100UF 25V**	**1**	
C505	**KZE1E470**	**C 470U 25V**	**1**	
C506	**KXG2W330**	**C 330UF 450V**	**1**	
C508	**ECJ2FB1H104K**	**C 0.1UF, K, 50V**	**1**	
C509	**ECJ2XB1H103K**	**C 0.01UF, K, 50V**	**1**	
C510	**KZE1H101**	**C 100UF 50V**	**1**	
C514	**KZE1E101**	**C 100UF 25V**	**1**	
C515	**ECJ2FB1H104K**	**C 0.1UF, K, 50V**	**1**	
C551	**ECKENA221KBR**	**C 221P 250V**	**1**	⚠
C552	**KZE1E331S**	**C 330UF 25V**	**1**	
C555	**TBB474K2**	**C 0.47UF 25V**	**1**	
C556	**KZE1E101**	**C 100UF 25V**	**1**	
C557	**TBB475K1**	**C 4.7UF 16V**	**1**	
C558	**KZE1A471**	**C 470UF 10V**	**1**	
C559-61	**TEB104K5**	**C 0.1UF 50V**	**3**	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D101,02	MA111	DIODE	2	
D104	S3V60	DIODE	1	
D107	MA111	DIODE	1	
D109	ERA15-10	DIODE	1	
D201,02	MA165	DIODE	2	
D203,04	MA728	DIODE	2	
D251	YG901C3R	DIODE	1	
D252	MA111	DIODE	1	
D253-55	YG901C3R	DIODE	3	
D301,02	MA165	DIODE	2	
D303,04	MA728	DIODE	2	
D351,52	YG805C06R	DIODE	2	
D355	AG01A	DIODE	1	
D401	YG901C3R	DIODE	1	
D402	AG01	DIODE	1	
D403	YG901C3R	DIODE	1	
D501	S1WBA80	DIODE	1	⚠
D502,03	ERA22-10	DIODE	2	
D505	MA111	DIODE	1	
D506	ST3D82	DIODE	1	
D508	AG01A	DIODE	1	
D511	ERA91-02	DIODE	1	
D551	RK39	DIODE	1	
D554	MA165	DIODE	1	
D555	MA111	DIODE	1	
D556	MA165	DIODE	1	
F201	216005BP	FUSE 250V 5A	1	⚠
F301	216005BP	FUSE 250V 5A	1	⚠
F501	216002BP	FUSE 250V 2A	1	⚠
IC101	FA5502P	IC	1	
IC401	AN1431T	LINEAR IC	1	
IC501	MIP3E30MP	IC	1	⚠
K101	DG12D1-0	RELAY	1	⚠
K102	DLS12D1-0	RELAY	1	⚠
L101,02	P3180207Z	CHOKE COIL	2	⚠
L103	ETB44CZ129AD	TRANS	1	
L104	EXCELSR35T	BEAD CHOKE	1	
L106	EXCELSR35T	BEAD CHOKE	1	
L108	EXCELSR35T	BEAD CHOKE	1	
L352,53	EXCELDR35C	BEAD CHOKE	2	
L501	EXCELSA35	BEAD CHOKE	1	
L502	EXCELDR35C	BEAD CHOKE	1	
MC101	MP00P7	MODULE	1	⚠
MC201	MLZNC101	MODULE	1	⚠
MC202	MP00R1	MODULE	1	⚠
MC301	MLZNC221	MODULE	1	⚠

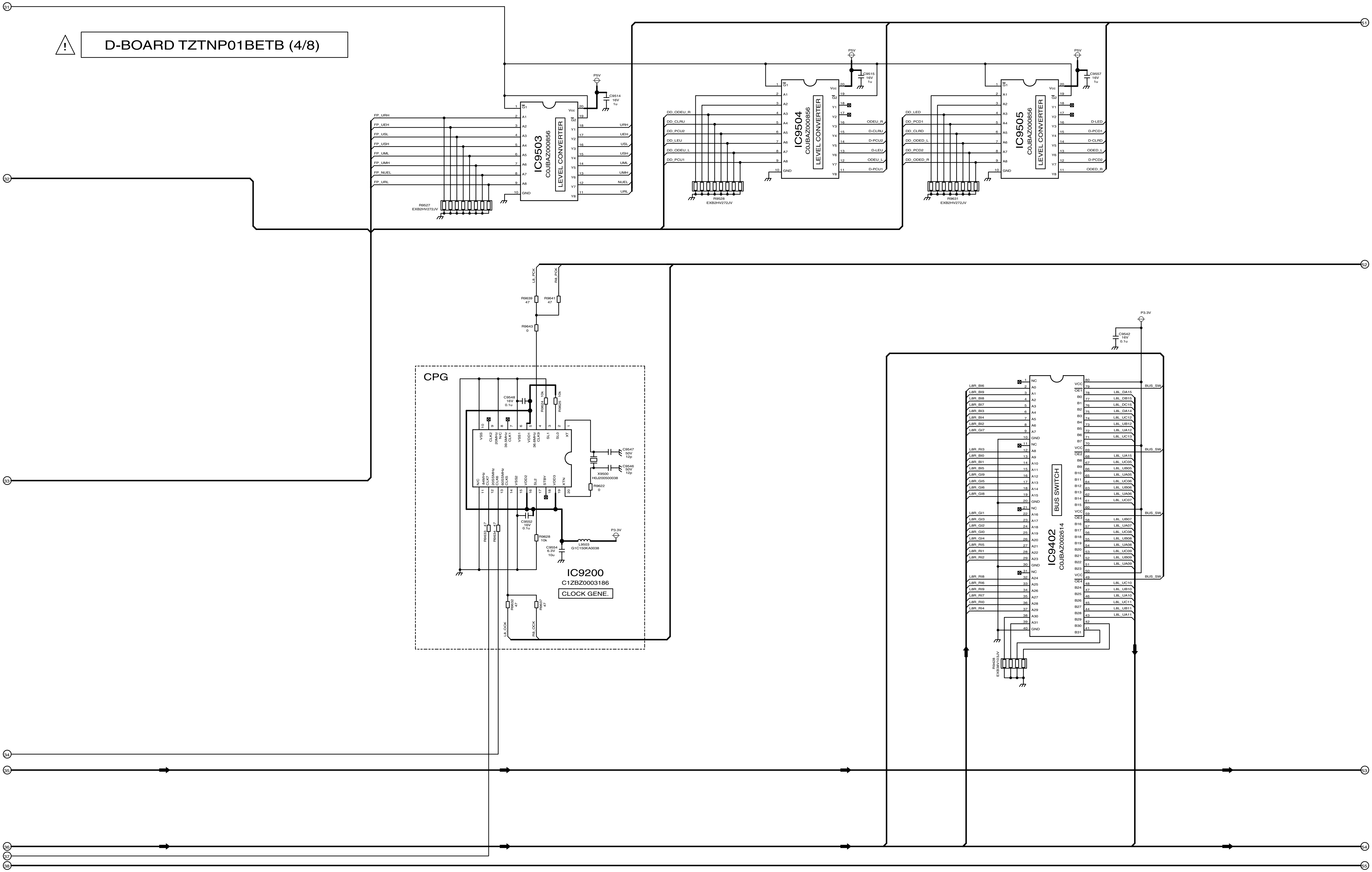
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
MC502	MLWNB103	MODULE	1	⚠
MC601	MLSZA100	MODULE	1	⚠
MC701	MLZDC103	MODULE	1	⚠
P2	B2P3-VH-B	CONNECTOR	1	
P5	B11B-PH-KS	CONNECTOR	1	
P9	B3P4VH-B-L	CONNECTOR	1	⚠
P10	B6B-PH-KS	CONNECTOR	1	
P11	B2P3-VH-B	CONNECTOR	1	
P12	B10B-PH-KS	CONNECTOR	1	
P23	B3B-PH-KS	CONNECTOR	1	
P25	B20B-PHDSS	CONNECTOR	1	
PC503	PS2581A	PHOTO CAPLER	1	⚠
PC505,06	PS2581A	PHOTO CAPLER	2	⚠
Q103	2SD2185	TRANSISTOR	1	
Q104	2SB1440	TRANSISTOR	1	
Q106	2SD1819A	TRANSISTOR	1	
Q301,02	2SK3568	FET	2	⚠
Q351,52	2SK3813	FET	2	
Q353,54	2SB1218A	TRANSISTOR	2	
Q401	2SA1699	TRANSISTOR	1	
Q402	2SK3302	FET	1	
Q403	2SD601A	TRANSISTOR	1	
Q404,05	2SK2391	FET	2	
Q406	2SD601A	TRANSISTOR	1	
Q501	2SK3302	FET	1	
Q502	2SK2731T	FET	1	
Q551,52	HAT1130R	FET	2	
Q553	2SB710A	TRANSISTOR	1	
R101	ERC12UGK185	S 1.8MOHM, K,1/2W	1	
R103	R5B100J	5W 10~	1	
R104-06	ERJ6ENF1213	M 121KOHM, 1/10W	3	
R107	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R108	ERJ6ENF1213	M 121KOHM, 1/10W	1	
R109-11	RF5EJR18B	5W 0.18~	3	
R113	ERJ6ENF3302	M 33KOHM, 1/10W	1	
R114	ERJ6ENF2701	M 2.7KOHM, 1/10W	1	
R115	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R116	ERJ12YJ470	M 47 OHM, J,1/2W	1	
R117	ERJ12YJ330	M 33 OHM,J, 1/2W	1	
R118	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R119	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R120	ERJ12YJ470	M 47 OHM, J,1/2W	1	
R122	ERJ6GEYJ154	M 150KOHM,J,1/10W	1	
R123	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R125	ERJ12YJ470	M 47 OHM, J,1/2W	1	
R127-29	ERJ6GEYJ183	M 18KOHM,J,1/10W	3	
R130	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R131	ER0S2CKF4993	M 499KOHM, F,1/4W	1	
R132,33	ERJ6ENF2493	M 249KOHM, 1/10W	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R134	ERJ6GEYJ470	M 47 OHM,J,1/10W	1	
R135	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R136	ERJ6ENF3162	M31.6KOHM, 1/10W	1	
R137	ERJ6GEYJ123	M 12KOHM,J,1/10W	1	
R138	ERJ6GEYJ474	M 470KOHM,J,1/10W	1	
R139	ERJ6ENF3302	M 33KOHM, 1/10W	1	
R140-42	ERJ6ENF5493	M 549KOHM, 1/10W	3	
R143	ERJ6ENF6041	M6.04KOHM, 1/10W	1	
R144	ERJ6ENF6191	M6.19KOHM, 1/10W	1	
R145	ERJ6GEYJ204	M 200KOHM,J,1/10W	1	
R146	ERJ6GEYJ684	M 680KOHM,J,1/10W	1	
R147	ERJ6GEYJ393	M 39KOHM,J,1/10W	1	
R149	ERJ6GEYJ393	M 39KOHM,J,1/10W	1	
R150,51	ERJ6ENF2493	M 249KOHM, 1/10W	2	
R201,02	ERJ12YJ221U	M 220 OHM,J, 1/2W	2	
R203,04	ERJ12YJ220	M 22 OHM,J, 1/2W	2	
R205-07	ERJ12YJ683	M 68KOHM, 1/2W	3	
R208,09	ERJ6GEYJ103	M 10KOHM,J,1/10W	2	
R210	ERX12SJ1R0	M 0.1 OHM, J,1/2W	1	
R251,52	ERG2SJ183H	M 18KOHM, J, 2W	2	
R253-55	ERJ6GEYJ114	M 110KOHM,J,1/10W	3	
R256,57	ERJ6GEYJ682	M 6.8KOHM,J,1/10W	2	
R258-61	ERJ6ENF6192	M61.9KOHM, 1/10W	4	
R262	ERJ6GEYJ220	M 22 OHM,J,1/10W	1	
R301,02	ERJ12YJ101	M 100 OHM,J, 1/2W	2	
R303,04	ERJ12YJ220	M 22 OHM,J, 1/2W	2	
R305-07	ERJ12YJ683	M 68KOHM, 1/2W	3	
R308,09	ERJ6GEYJ103	M 10KOHM,J,1/10W	2	
R310	ERX12SJ1R0	M 0.1 OHM, J,1/2W	1	
R351	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R353	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R354	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R356,57	ERJ6GEYJ103	M 10KOHM,J,1/10W	2	
R358	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R359,60	ERJ6GEYJ223	M 22KOHM,J,1/10W	2	
R361	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R362	ERDS2TJ101	C 100 OHM, J,1/4W	1	
R363	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	1	
R364	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R365-67	ERJ6GEYJ223	M 22KOHM,J,1/10W	3	
R368	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R369,70	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	2	
R371	ERJ6ENF1622	M16.2KOHM, 1/10W	1	
R372	ERJ6GEYJ1R0	M 1 OHM,J,1/10W	1	
R373	ERDS2TJ471	C 470 OHM, J,1/4W	1	
R401	ERJ12YJ100	M 10 OHM,J, 1/2W	1	
R402,03	ERJ12YJ104U	M 100KOHM, 1/2W	2	
R404	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R405,06	ERJ6GEYJ184	M 180KOHM,J,1/10W	2	
R407	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R408	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R409	ERG2SJ682	M 6.8KOHM, J, 2W	1	
R410	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R412	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R413	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R414-17	ERJ6GEYJ123	M 12KOHM,J,1/10W	4	
R418	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	1	
R420	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R421	ERJ6ENF4751	M4.75KOHM, 1/10W	1	
R422	ERJ6ENF1581	M1.58KOHM, 1/10W	1	
R423,24	ERJ6ENF7152	M71.5KOHM, 1/10W	2	
R425	ERJ6ENF3002	M 30KOHM, 1/10W	1	
R426	RF2EJR47B	W0.47 OHM, J, 2W	1	
R428	ERJ6ENF6342	M6.34KOHM, 1/10W	1	
R429	ERJ6ENF5362	M5.36KOHM, 1/10W	1	
R430	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R474	ERJ6ENF1052	M10.5KOHM, 1/10W	1	
R477-80	ERJ6ENF1052	M10.5KOHM, 1/10W	4	
R501	ERJ12YJ474	M 470KOHM, 1/2W	1	
R503	ERJ12YJ474	M 470KOHM, 1/2W	1	
R505	ERJ6GEYJ334	M 330KOHM,J,1/10W	1	
R507,08	ERJ6GEYJ334	M 330KOHM,J,1/10W	2	
R509-12	ERJ6ENF8253	M 825KOHM, 1/10W	4	
R514,15	ERJ6ENF8253	M 825KOHM, 1/10W	2	
R518	ERJ12YJ100	M 10 OHM,J, 1/2W	1	
R519	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R528,29	ERJ6ENF2703	M 270KOHM, 1/10W	2	
R530	ER0S2TKF5363	M 536KOHM, F,1/4W	1	
R531	ERJ6GEYJ4R7	M 4.7 OHM,J,1/10W	1	
R560	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R561	ERDS2TJ332	C 3.3KOHM, J,1/4W	1	
R563	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	1	
R564	ERJ6GEYJ391	M 390 OHM,J,1/10W	1	
R565	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R566	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R567	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R568	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R569,70	ERJ12YJ151	M 150 OHM,J, 1/2W	2	
R571	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	1	
R572,73	ERJ6ENF2703	M 270KOHM, 1/10W	2	
R574	ER0S2TKF5363	M 536KOHM, F,1/4W	1	
R580	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
RF101	A5MC100JP2	139C 10	1	⚠
T201	ETB57LZ156AD	TRANS	1	⚠
T301	ETB50LZ116AD	TRANS	1	⚠
T501	ETB25KA1C6AD	TRANS	1	⚠
VR251	EVMEASA01B54	VARIABLE RESISTOR	1	
VR351	EVMEASA01B14	VARIABLE RESISTOR	1	
VR401	EVMEASA01B34	VARIABLE RESISTOR	1	
Z101	TND14V751	VARISTOR	1	⚠
Z102	ERZVGAD471	VARISTOR	1	⚠
Z501	ERZVGAD471	VARISTOR	1	⚠

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
ZD101	MA8051	ZENER DIODE	1	
ZD351-54	MA8150	ZENER DIODE	4	
ZD405,06	MA4300N	ZENER DIODE	2	
ZD407	MA4120N	ZENER DIODE	1	
ZD408	MA8220	ZENER DIODE	1	
ZD501	MA8270	ZENER DIODE	1	
ZD502	MA4300N	ZENER DIODE	1	

17. Schematic Diagram for printing with A4


D-BOARD TZTNP01BETB (4/8)
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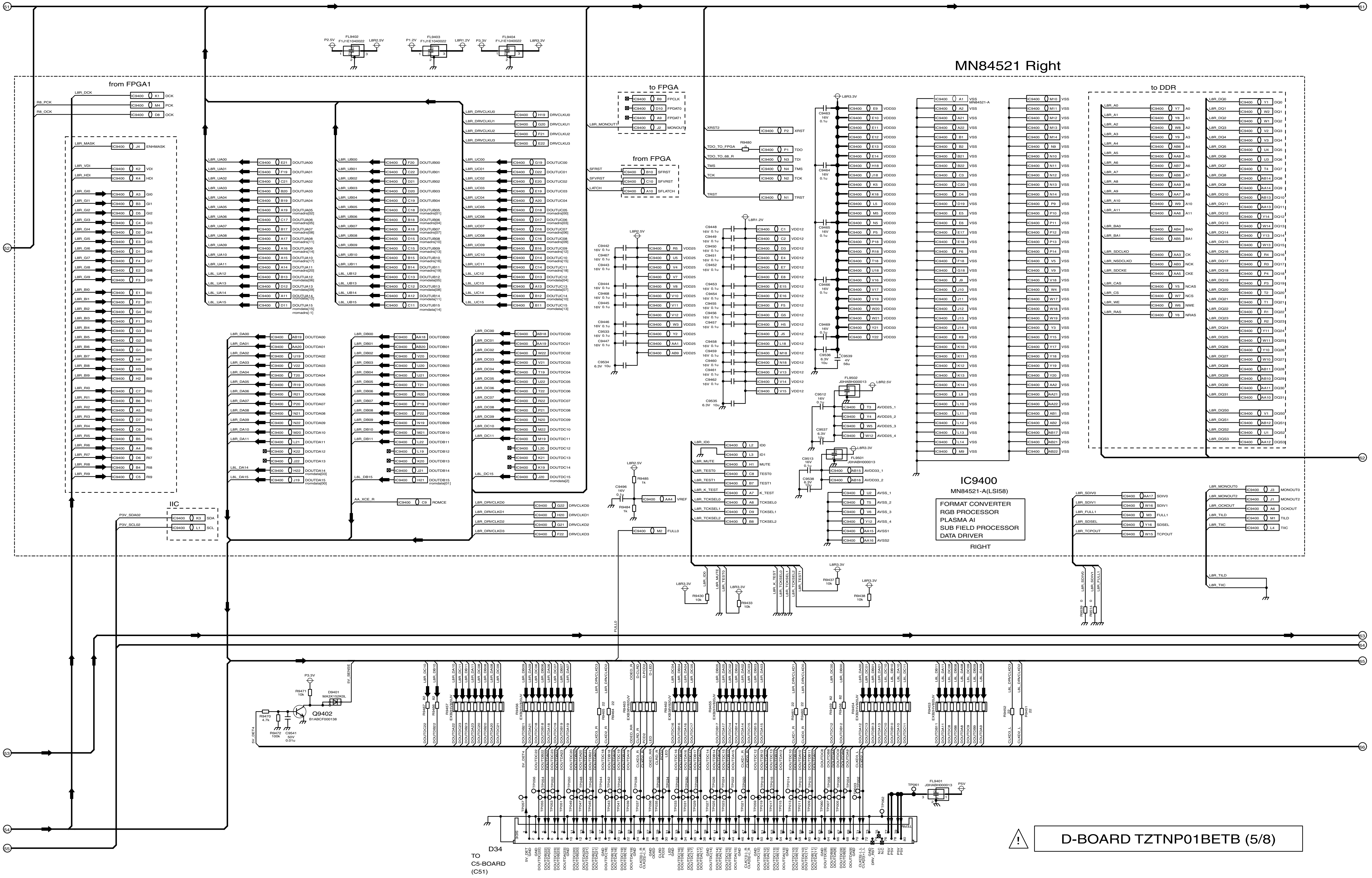
㊳
(51)
(52)
(53)
(54)
(55)
FP_URH
FP_UEH
FP_USL
FP_USH
FP_UML
FP_UMH
FP_NUEL
FP_URL
R9527
EXB2HV272JV
IC9503
C0JBAZ000856
LEVEL CONVERTER
P5V
C9514
16V
1u
URH
UEH
USL
USH
UML
UMH
NUEL
URL
DD_ODEU_R
DD_CLRU
DD_PCU2
DD_LEU
DD_ODEU_L
DD_PCU1
R9528
EXB2HV272JV
IC9504
C0JBAZ000856
LEVEL CONVERTER
C9515
16V
1u
ODEU_R
D-CLRU
D-PCU2
D-LEU
ODEU_L
D-PCU1
DD_LED
DD_PCD1
DD_CLRD
DD_ODED_L
DD_PCD2
DD_ODED_R
R9631
EXB2HV272JV
IC9505
C0JBAZ000856
LEVEL CONVERTER
C9557
16V
1u
D-LED
D-PCD1
D-CLRD
ODED_L
D-PCD2
ODED_R
L8_PCK
R8_PCK
R9639
47
R9641
47
R9643
0
CPG
C9548
16V
0.1u
R9624 10k
R9625 10k
VSS
CLK2
20MHz
N/C
39.5MHz
CLK1
VSS1
VDD1
36.6MHz
CLK9
SL1
SL0
XT
N/C
84MHz
CLK7
20SSMHz
CLK6
60SSMHz
CLK5
VSS2
VDD2
SL2
STBY
VDD3
XTN
C9547
50V
12p
C9546
50V
12p
X9500
H0J200500038
R9622
0
C9552
16V
0.1u
R9633 47
R9634 47
R9628
10k
C9554
6.3V
10u
L9503
G1C150KA0038
P3.3V
IC9200
C1ZBZ0003186
CLOCK GENE.
R9632
47
R9637
47
L8_OCK
R8_OCK
P3.3V
C9542
16V
0.1u
L8R_BI6
L8R_BI9
L8R_BI8
L8R_BI7
L8R_BI3
L8R_BI4
L8R_BI2
L8R_GI7
L8R_RI3
L8R_BI0
L8R_BI1
L8R_BI5
L8R_GI9
L8R_GI5
L8R_GI6
L8R_GI8
L8R_GI1
L8R_GI3
L8R_GI2
L8R_GI0
L8R_GI4
L8R_RI5
L8R_RI1
L8R_RI2
L8R_RI8
L8R_RI6
L8R_RI9
L8R_RI7
L8R_RI0
L8R_RI4
BUS SWITCH
IC9402
C0JBAZ002614
BUS_SW
L8L_DA15
L8L_DB15
L8L_DC15
L8L_DA14
L8L_UC12
L8L_UB12
L8L_UA12
L8L_UC13
L8L_UA15
L8L_UC05
L8L_UB05
L8L_UA05
L8L_UC06
L8L_UB06
L8L_UA06
L8L_UC07
L8L_UB07
L8L_UA07
L8L_UC08
L8L_UB08
L8L_UA08
L8L_UC09
L8L_UB09
L8L_UA09
L8L_UC10
L8L_UB10
L8L_UA10
L8L_UC11
L8L_UB11
L8L_UA11
R9428
EXB38V103JV

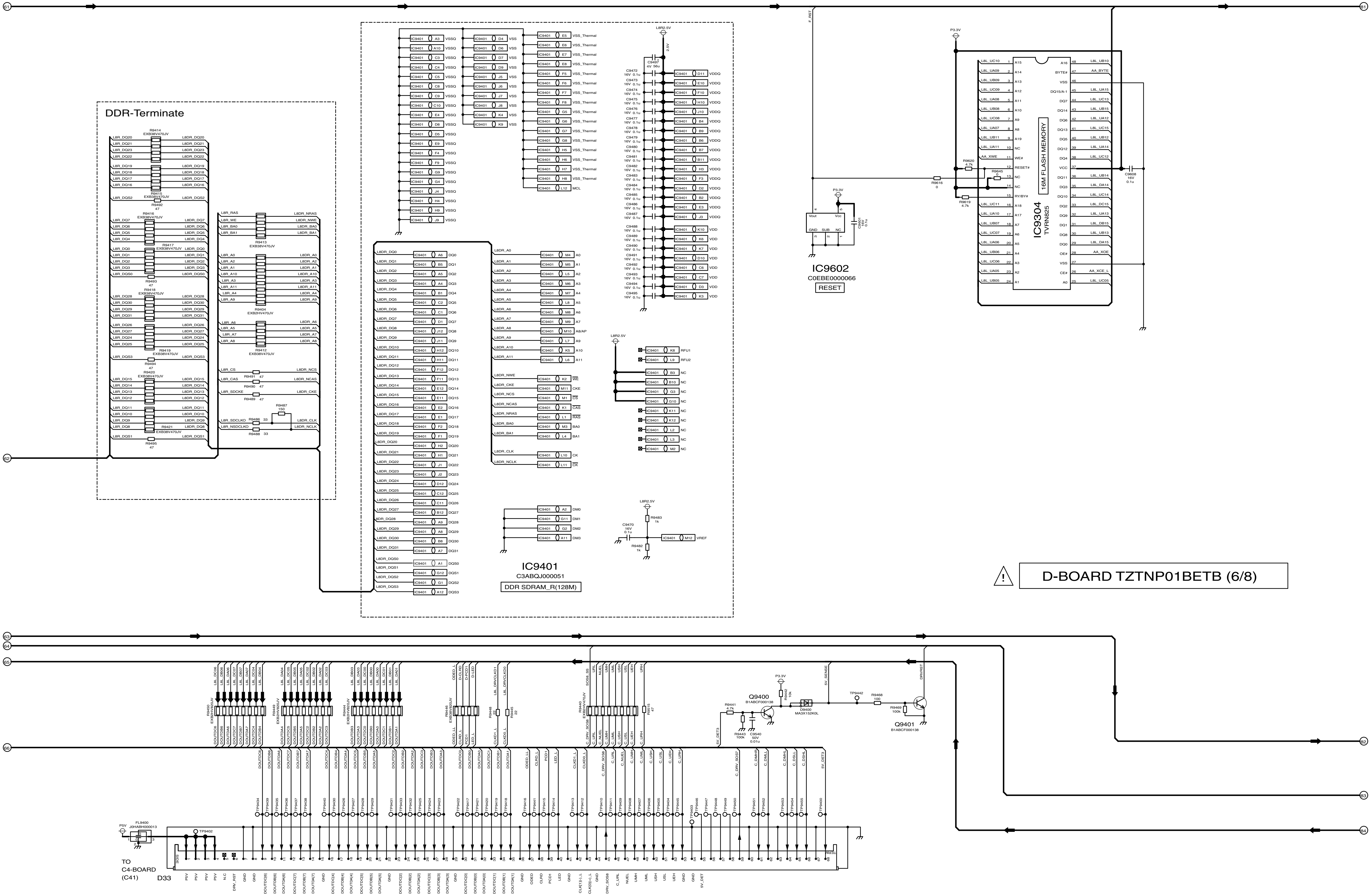
TH-50PV60A
D-Board (4 of 8) Schematic Diagram

TH-50PV60A
D-Board (4 of 8) Schematic Diagram


MN84521 Right
from FPGA1
to FPGA
from FPGA
to DDR
IIC
FL9402
FL9403
FL9404
IC9400
MN84521-A(LSI58)
FORMAT CONVERTER
RGB PROCESSOR
PLASMA AI
SUB FIELD PROCESSOR
DATA DRIVER
RIGHT
Q9402
D9401
FL9401
FL9501
FL9502
D34
TO
C5-BOARD
(C51)
D-BOARD TZTNP01BETB (5/8)

TH-50PV60A
D-Board (5 of 8) Schematic Diagram

TH-50PV60A
D-Board (5 of 8) Schematic Diagram

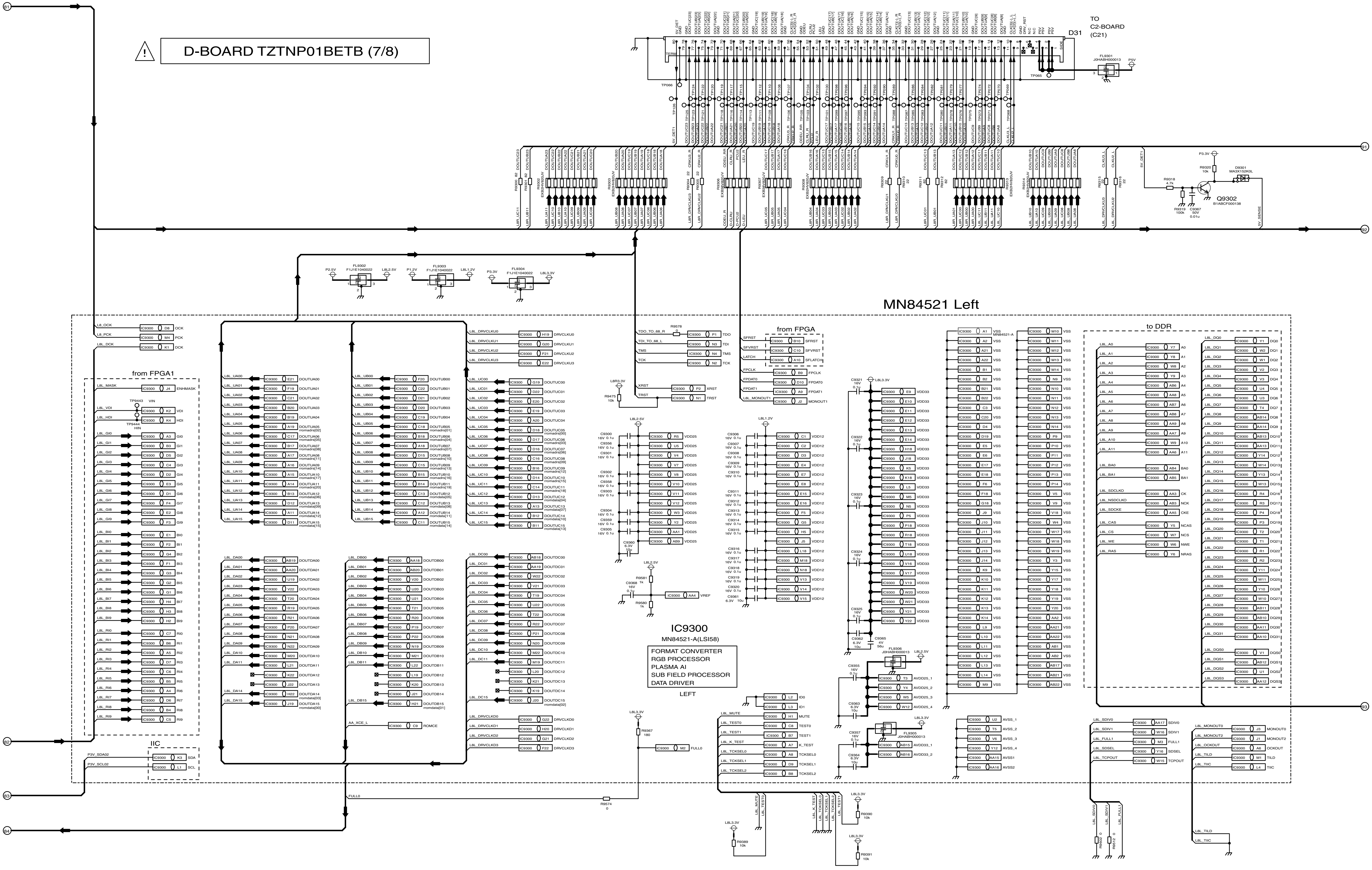


DDR-Terminate
IC9401
C3ABQJ000051
DDR SDRAM_R(128M)
IC9602
C0EBE0000066
RESET
IC9304
TVRN825
16M FLASH MEMORY
D-BOARD TZTNP01BETB (6/8)
Q9400
B1ABCF000138
Q9401
B1ABCF000138
D9400
MA3X152K0L
FL9400
J0HABH000013
TO
C4-BOARD
(C41)
D33

TH-50PV60A
D-Board (6 of 8) Schematic Diagram

TH-50PV60A
D-Board (6 of 8) Schematic Diagram

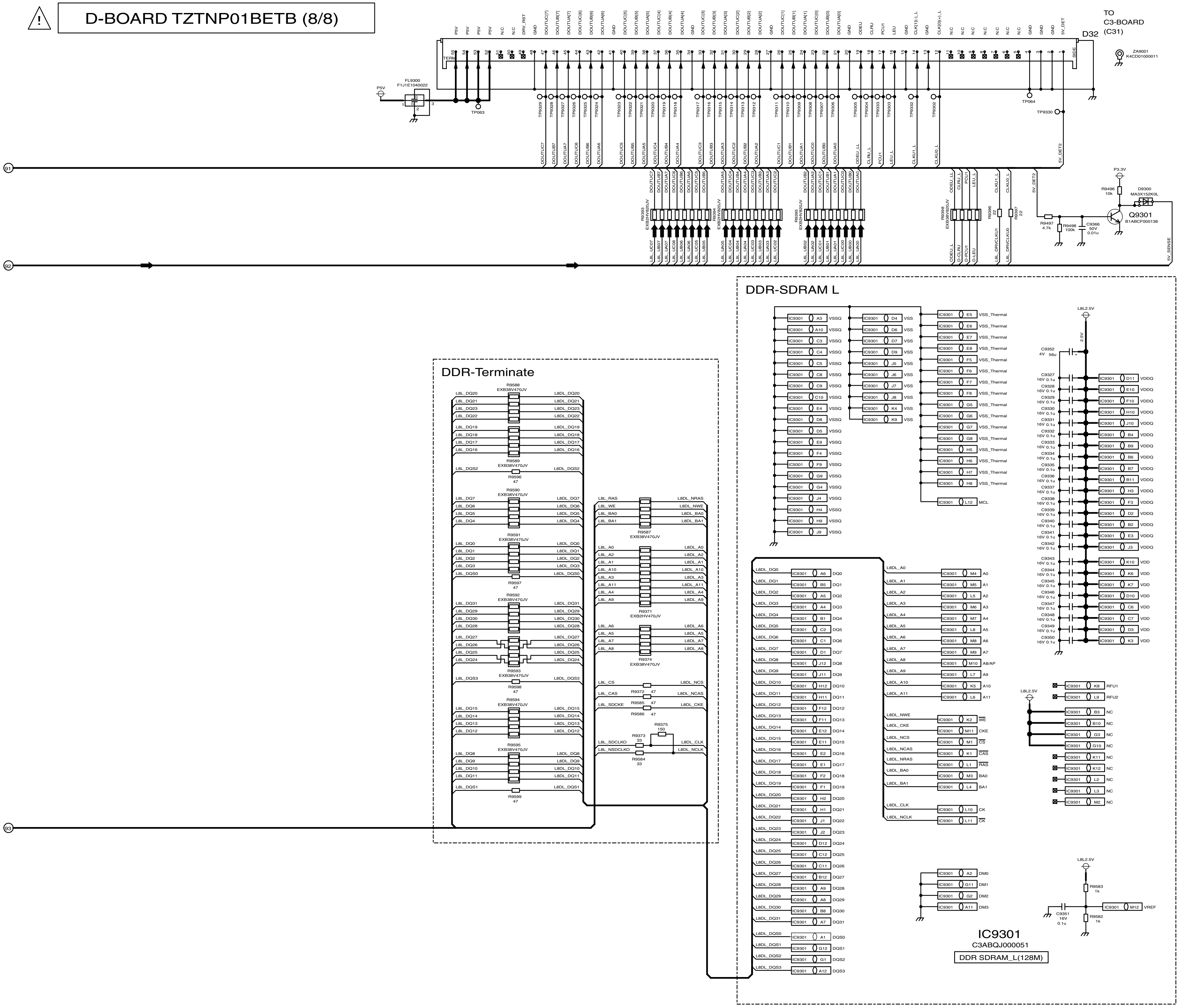
D-BOARD TZTNP01BETB (7/8)



TO C2-BOARD (C21)
D31
FL9301 J0HABH000013
P5V
TP066
TP065
FL9302 F1J1E1040022
FL9303 F1J1E1040022
FL9304 F1J1E1040022
P2.5V
L8L2.5V
P1.2V
L8L1.2V
P3.3V
L8L3.3V
R9318 4.7k
R9319 100k
C9367 50V 0.01u
R9320 10k
D9301 MA3X152K0L
Q9302 B1ABCF000138
5V_SENSE
5V_DET1
MN84521 Left
from FPGA1
from FPGA
to DDR
IIC
L8L_OCK
L8L_PCK
L8L_DCK
L8L_MASK
ENHMASK
TP9443 VIN
TP9444 HIN
L8L_VDI
L8L_HDI
P3V_SDA02
P3V_SCL02
SDA
SCL
L8L_DRVCLKU0
L8L_DRVCLKU1
L8L_DRVCLKU2
L8L_DRVCLKU3
L8L_DRVCLKD0
L8L_DRVCLKD1
L8L_DRVCLKD2
L8L_DRVCLKD3
AA_XCE_L
ROMCE
TDO_TO_68_R
TDI_TO_68_L
TMS
TCK
XRST
TRST
SFRST
SFVRST
LATCH
FPCLK
FPDAT0
FPDAT1
L8L_MONOUT1
R9578 0
R9475 10k
R9581 1k
R9580 1k
C9368 16V 0.1u
VREF
R9367 180
FULL0
R9574 0
IC9300
MN84521-A(LSI58)
FORMAT CONVERTER
RGB PROCESSOR
PLASMA AI
SUB FIELD PROCESSOR
DATA DRIVER
LEFT
FL9306 J0HABH000013
FL9305 J0HABH000013
L8L_MUTE
L8L_TEST0
L8L_TEST1
L8L_K_TEST
L8L_TCKSEL0
L8L_TCKSEL1
L8L_TCKSEL2
R9389 10k
R9390 10k
R9391 10k
L8L_SDIV0
L8L_SDIV1
L8L_FULL1
L8L_SDSEL
L8L_TCPOUT
L8L_MONOUT0
L8L_MONOUT2
L8L_OCKOUT
L8L_TILD
L8L_TIIC
R9602 0
R9612 0

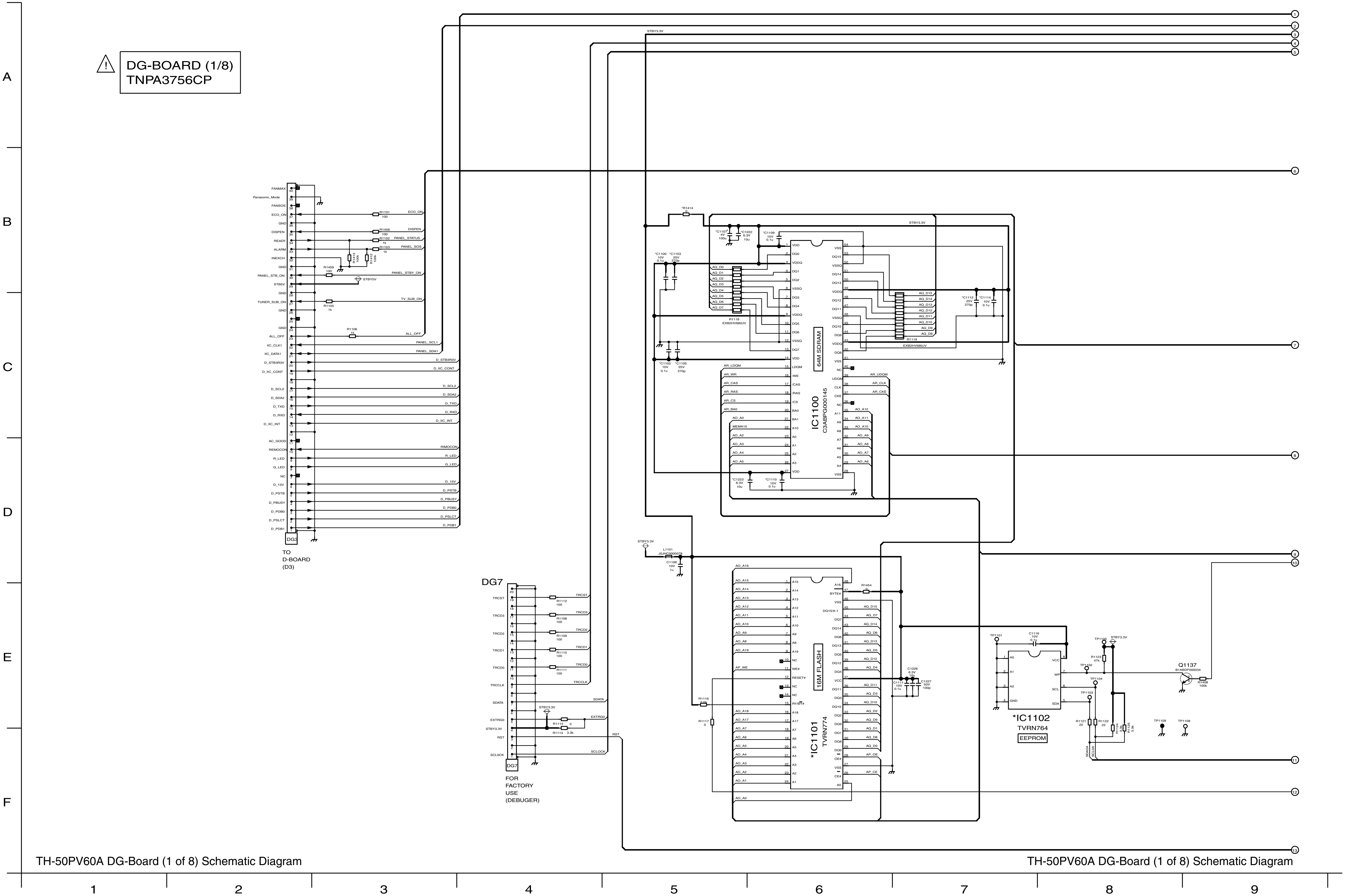
TH-50PV60A
D-Board (7 of 8) Schematic Diagram

D-BOARD TZTNP01BETB (8/8)


TO
C3-BOARD
(C31)
D32
ZA9001
K4CD01000011
P5V
FL9300
F1J1E1040022
TP063
TP064
TP9330
5V_DET2
P3.3V
R9496
10k
D9300
MA3X152K0L
Q9301
B1ABCF000138
R9497
4.7k
R9498
100k
C9366
50V
0.01u
5V_SENSE
DDR-Terminate
DDR-SDRAM L
L8L2.5V
C9352
4V 56u
R9583
1k
R9582
1k
C9351
16V
0.1u
VREF
IC9301
C3ABQJ000051
DDR SDRAM_L(128M)

TH-50PV60A
D-Board (8 of 8) Schematic Diagram

TH-50PV60A
D-Board (8 of 8) Schematic Diagram



DG-BOARD (1/8)
TNPA3756CP
A
B
C
D
E
F
1
2
3
4
5
6
7
8
9
FANMAX
Panasonic_Mode
FANSOS
ECO_ON
GND
DISPEN
READY
ALARM
INEXCH
PANEL_STB_ON
STB5V
TUNER_SUB_ON
ALL_OFF
IIC_CLK1
IIC_DATA1
D_STB3R3V
D_IIC_CONT
D_SCL2
D_SDA2
D_TXD
D_RXD
D_IIC_INT
AC_GOOD
REMOCON
R_LED
G_LED
NC
D_15V
D_PSTB
D_PBUSY
D_PDB0
D_PSLCT
D_PDB1
DG3
TO
D-BOARD
(D3)
R1101 100
R1458 100
R1102 1k
R1103 1k
R1413 100k
R1412 100k
R1459 100
R1105 1k
R1106 1k
STBY5V
ECO_ON
DISPEN
PANEL_STATUS
PANEL_SOS
PANEL_STBY_ON
TV_SUB_ON
ALL_OFF
PANEL_SCL1
PANEL_SDA1
RIMOCON
DG7
TRCST
TRCD3
TRCD2
TRCD1
TRCD0
TRCCLK
SDATA
EXTRG0
STBY3.3V
RST
SCL0CK
SCLOCK
R1112 100
R1108 100
R1109 100
R1110 100
R1111 100
R1114 0
R1113 3.3k
FOR
FACTORY
USE
(DEBUGER)
*R1414 0
*C1107 4V 100u
*C1222 6.3V 10u
*C1109 10V 0.1u
*C1100 10V 0.1u
*C1103 25V 270p
*C1102 10V 0.1u
*C1105 25V 270p
*C1223 6.3V 10u
*C1110 10V 0.1u
*C1112 25V 270p
*C1114 10V 0.1u
R1118 EXB2HV680JV
R1119 EXB2HV680JV
AQ_D0
AQ_D1
AQ_D2
AQ_D3
AQ_D4
AQ_D5
AQ_D6
AQ_D7
AQ_D8
AQ_D9
AQ_D10
AQ_D11
AQ_D12
AQ_D13
AQ_D14
AQ_D15
AR_LDQM
AR_WR
AR_CAS
AR_RAS
AR_CS
AR_BA0
AO_A0
MEMA10
AO_A2
AO_A3
AO_A4
AO_A5
AO_A6
AO_A7
AO_A8
AO_A9
AO_A10
AO_A11
AO_A12
AR_UDQM
AR_CLK
AR_CKE
VDD
DQ0
VDDQ
DQ1
DQ2
VSSQ
DQ3
DQ4
DQ5
DQ6
DQ7
LDQM
/WE
/CAS
/RAS
/CS
BA0
BA1
A10
A0
A1
A2
A3
VSS
DQ15
DQ14
DQ13
DQ12
DQ11
DQ10
DQ9
DQ8
UDQM
CLK
CKE
A11
A9
A8
A7
A6
A5
A4
64M SDRAM
IC1100
C3ABPG000145
L1101 J0JHC0000078
C1106 10V 1u
AO_A16
AO_A15
AO_A14
AO_A13
AO_A19
AP_WE
AO_A18
AO_A17
AO_A1
R1116 5.6k
R1117 0
R1454 0
A16
A15
A14
A13
A12
A19
WE#
RESET#
RY/BY#
A18
A17
BYTE#
DQ15/A-1
VCC
OE#
CE#
AP_OE
AP_CE
16M FLASH
*IC1101
TVRN774
C1111 10V 0.1u
C1226 6.3V 10u
C1227 50V 100p
TP1101
C1116 10V 0.1u
TP1105
TP1102
TP1104
TP1103
TP1109
TP1108
R1123 47k
R1121 22
R1122 22
R1124 3.3k
R1125 3.3k
A0
A1
A2
GND
WP
SCL
SDA
*IC1102
TVRN764
EEPROM
SDA0A
SCL0A
Q1137
B1ABDF000034
R1408 100k
①
②
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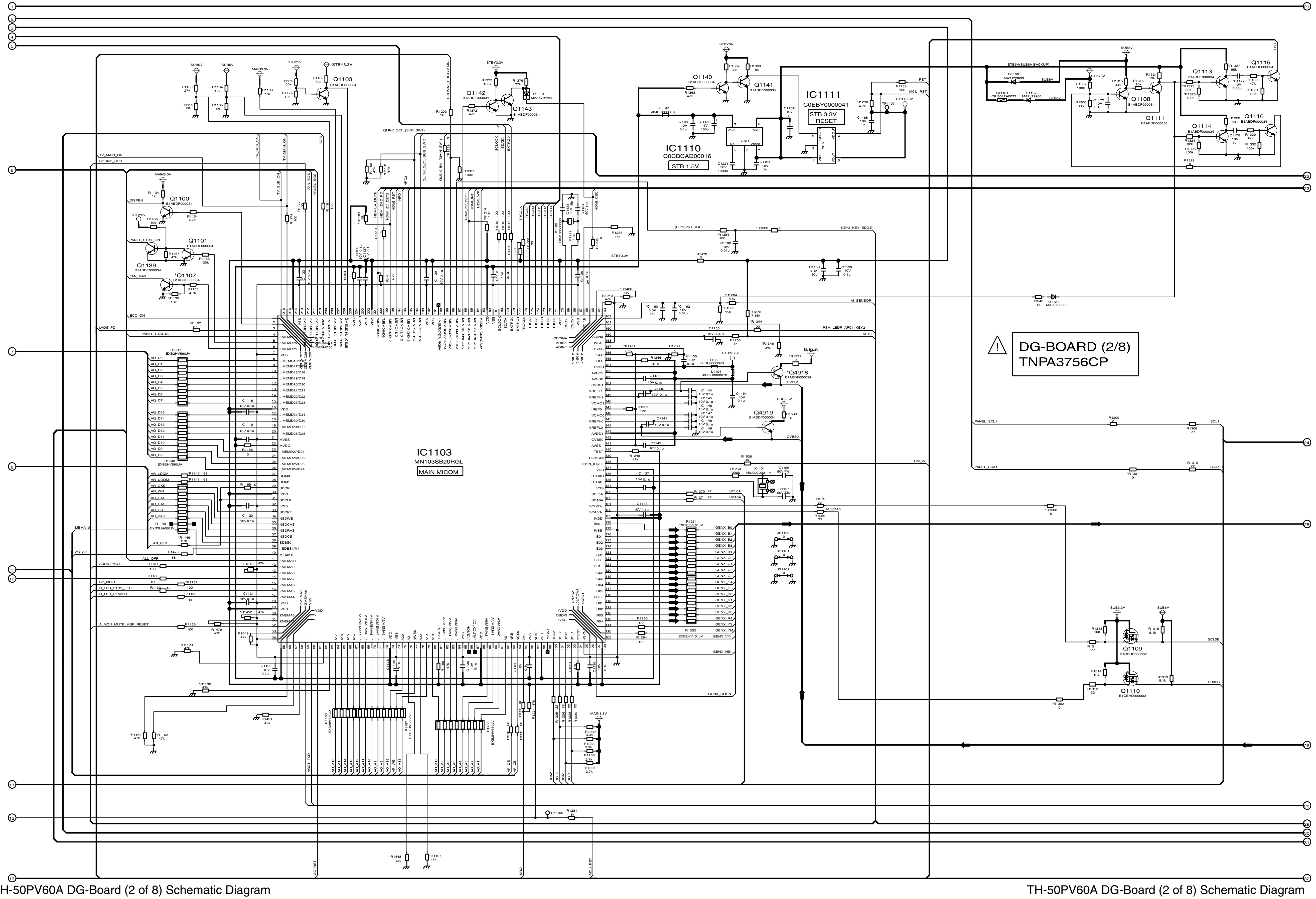
⑪
⑫
⑬



DG-BOARD (2/8)
TNPA3756CP
IC1103
MN103SB20RGL
MAIN MICOM
IC1110
C0CBCAD00016
STB 1.5V
IC1111
C0EBY0000041
STB 3.3V
RESET
Q1100
Q1101
Q1102
Q1103
Q1139
Q1140
Q1141
Q1142
Q1143
Q1108
Q1111
Q1113
Q1114
Q1115
Q1116
Q1109
B1CBHD000002
Q1110
B1CBHD000002
Q4918
Q4919
B1ABDF000034
X1101
TP1106
TP1107
JS1100
JS1101
JS1102
STBY5V
STBY3.3V
SUB9V
SUB5V
SUB3.3V
MAIN3.3V
TV_MAIN_ON
SOUND_SOS
DISPEN
PANEL_STBY_ON
FAN_MAX
ECO_ON
LVDS_PD
PANEL_STATUS
AUDIO_MUTE
SP_MUTE
R_LED_STBY_LED
G_LED_POWER
A_MON_MUTE_MSP_RESET
ALL_OFF
AI_SENSOR
PSM_LEDR_AFC1_KEY2
KEY1
KEY3_KEY_EDGE
RM_IN
PANEL_SCL1
PANEL_SDA1
SCL1
SDA1
SCL0B
SDA0B
GENX_CLKIN
GENX_HIN
GENX_VIN
RST
MCU_RST
QLINK_SEL_(SUB_SW2)
STB5V(SUB5V BACKUP)
1
2
3
4
5
6
7
8
9
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11
12
13
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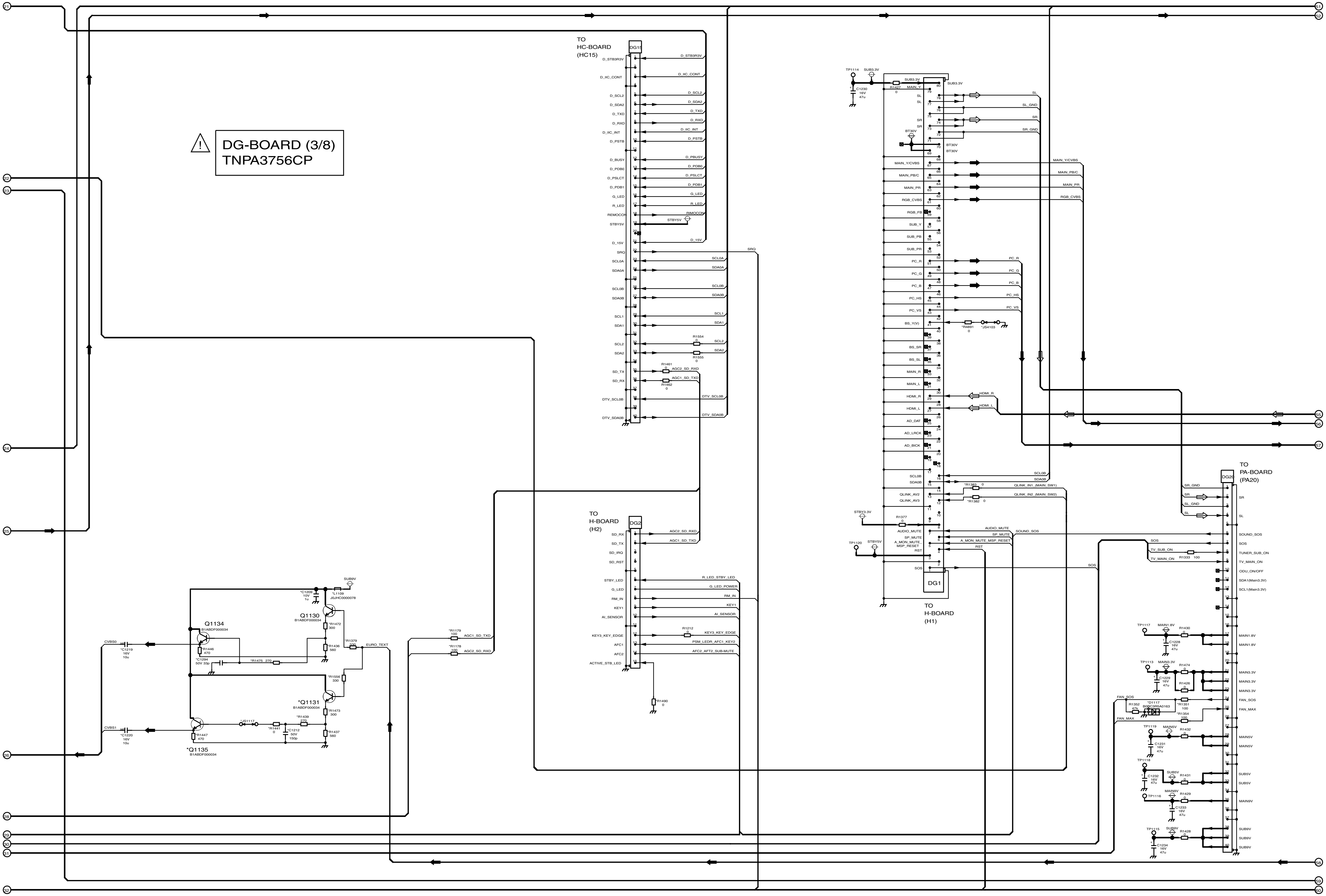
32

TH-50PV60A DG-Board (2 of 8) Schematic Diagram

TH-50PV60A DG-Board (2 of 8) Schematic Diagram

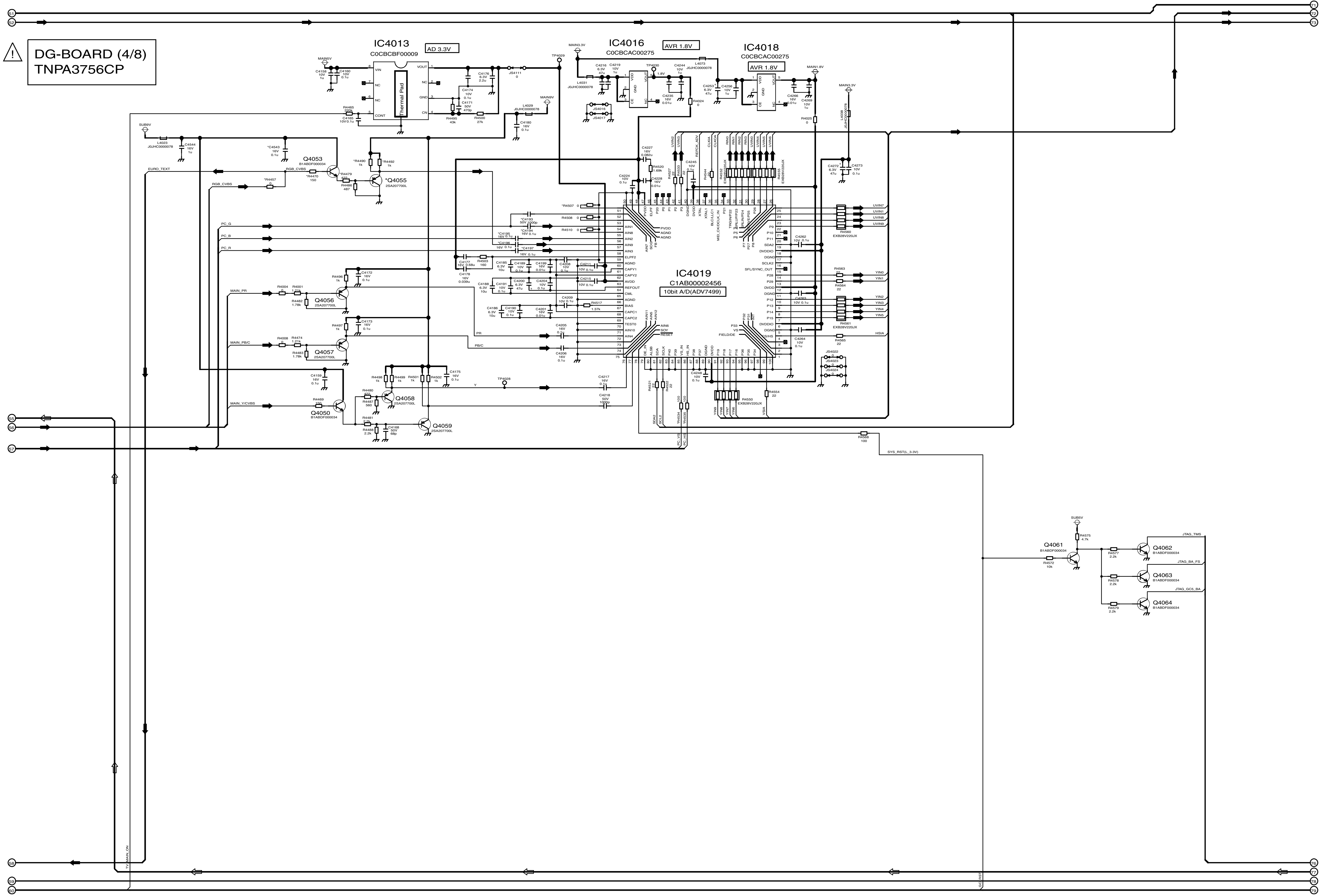
10 11 12 13 14 15 16 17 18


DG-BOARD (3/8)
TNPA3756CP
TO
HC-BOARD
(HC15)
DG15
TO
H-BOARD
(H2)
DG2
TO
H-BOARD
(H1)
DG1
TO
PA-BOARD
(PA20)
DG20
Q1134
B1ABDF000034
Q1130
B1ABDF000034
*Q1131
B1ABDF000034
*Q1135
B1ABDF000034
CVBS0
CVBS1
EURO_TEXT
SUB9V
*L1109
J0JHC0000078
AGC1_SD_TXD
AGC2_SD_RXD
D_STB3R3V
D_IIC_CONT
D_SCL2
D_SDA2
D_TXD
D_RXD
D_IIC_INT
D_PSTB
D_BUSY
D_PDB0
D_PSLCT
D_PDB1
G_LED
R_LED
REMOCON
STBY5V
D_15V
SRQ
SCL0A
SDA0A
SCL0B
SDA0B
SCL1
SDA1
SCL2
SDA2
SD_TX
SD_RX
DTV_SCL0B
DTV_SDA0B
SD_IRQ
SD_RST
STBY_LED
RM_IN
KEY1
AI_SENSOR
KEY3_KEY_EDGE
AFC1
AFC2
ACTIVE_STB_LED
R_LED_STBY_LED
G_LED_POWER
PSM_LEDR_AFC1_KEY2
AFC2_AFT2_SUB-MUTE
TP1114
SUB3.3V
MAIN_Y
SL
SR
SL_GND
SR_GND
BT30V
MAIN_Y/CVBS
MAIN_PB/C
MAIN_PR
RGB_CVBS
RGB_FB
SUB_Y
SUB_PB
SUB_PR
PC_R
PC_G
PC_B
PC_HS
PC_VS
BS_Y(V)
BS_SR
BS_SL
MAIN_R
MAIN_L
HDMI_R
HDMI_L
AD_DAT
AD_LRCK
AD_BICK
QLINK_AV2
QLINK_AV3
QLINK_IN1_(MAIN_SW1)
QLINK_IN2_(MAIN_SW2)
STBY3.3V
AUDIO_MUTE
SP_MUTE
A_MON_MUTE_MSP_RESET
RST
SOS
SOUND_SOS
TUNER_SUB_ON
TV_SUB_ON
TV_MAIN_ON
ODU_ON/OFF
SDA1(Main3.3V)
SCL1(Main3.3V)
MAIN1.8V
MAIN3.3V
FAN_SOS
FAN_MAX
MAIN5V
SUB5V
MAIN9V
SUB9V
TP1117
TP1113
TP1119
TP1118
TP1116
TP1115
TP1120
*D1117
B0BC3R5A0163
*JS4103
*JS1117

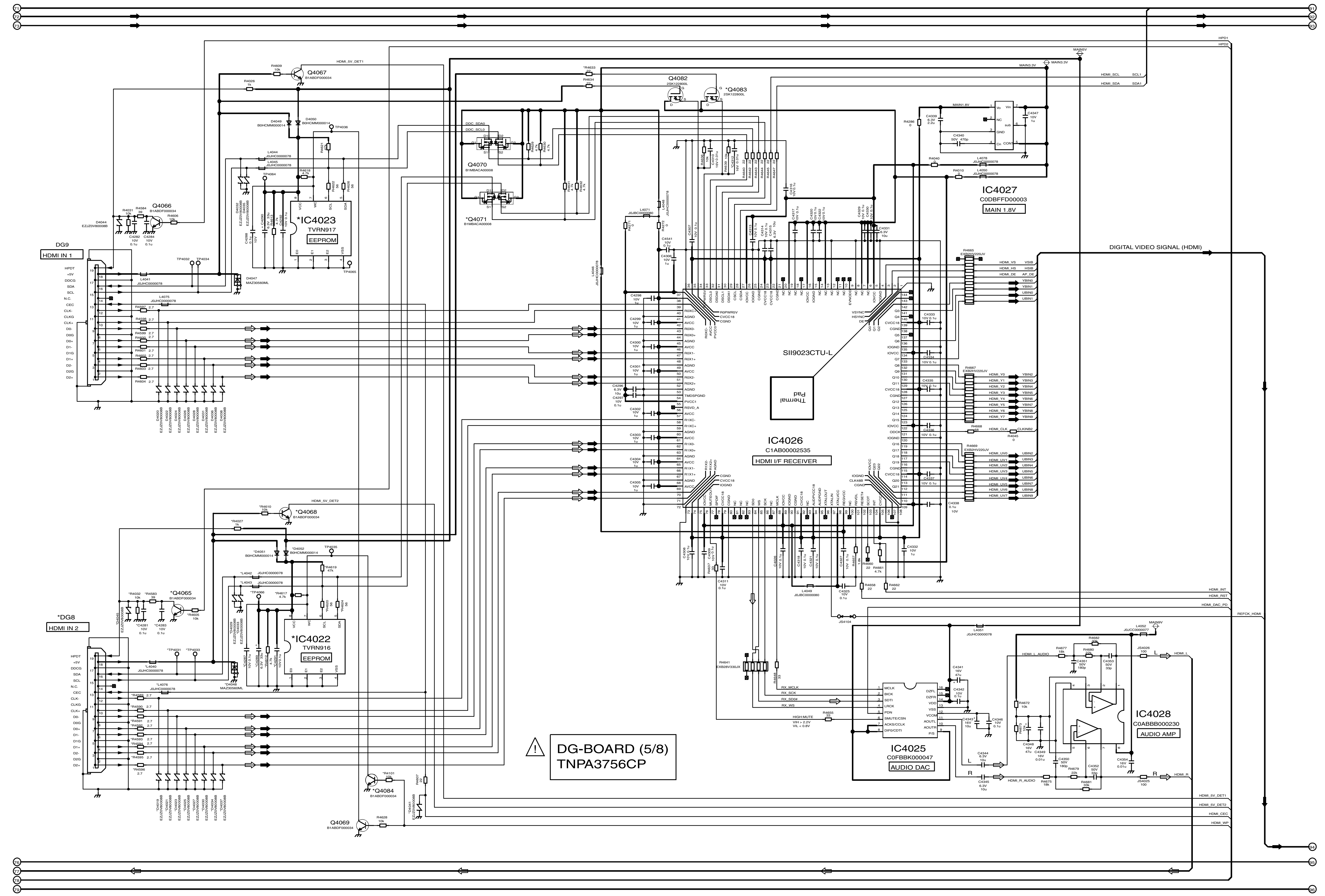
TH-50PV60A DG-Board (3 of 8) Schematic Diagram

TH-50PV60A DG-Board (3 of 8) Schematic Diagram

19 20 21 22 23 24 25 26 27

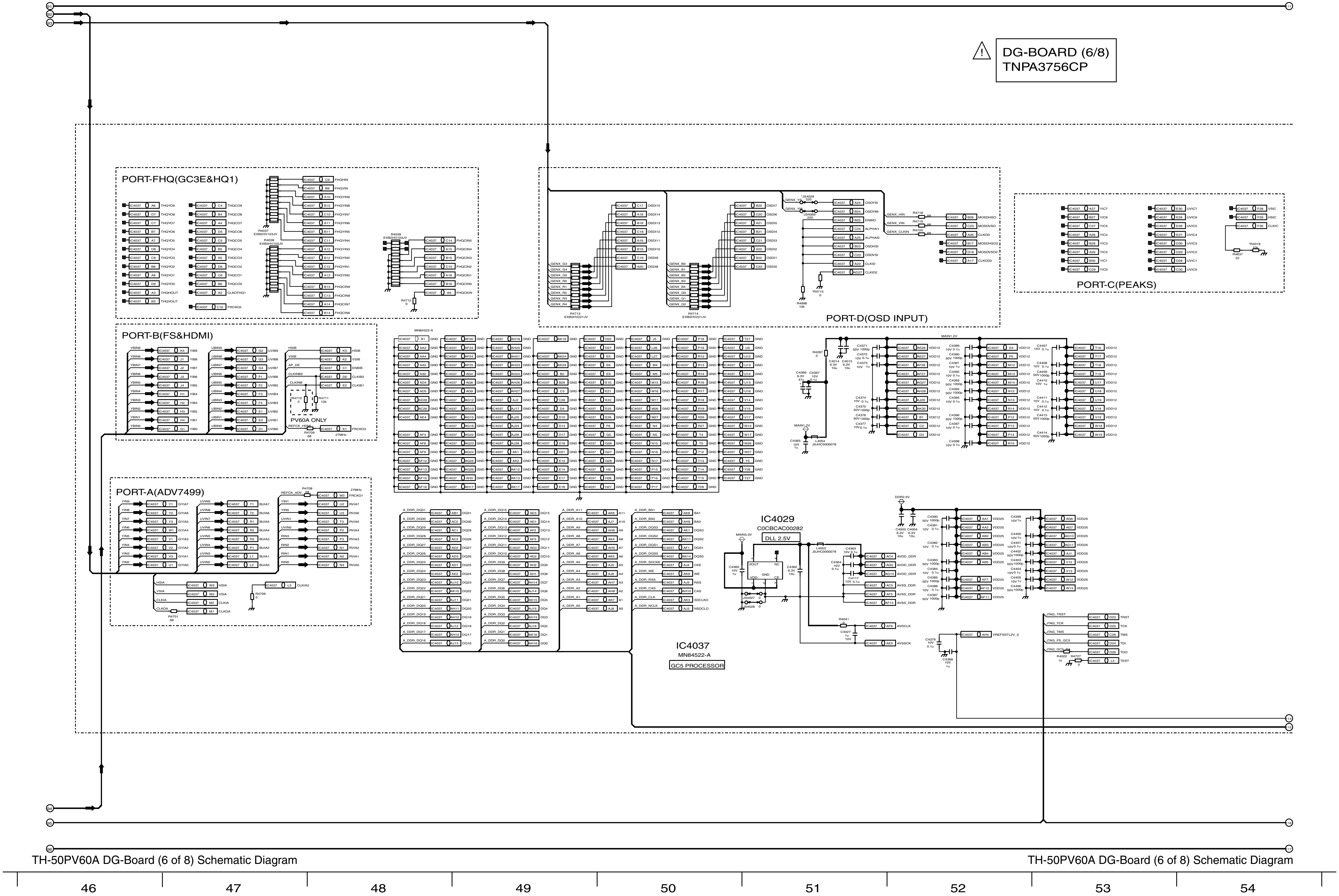

DG-BOARD (4/8)
TNPA3756CP
IC4013
C0CBCBF00009
AD 3.3V
Thermal Pad
IC4016
C0CBCAC00275
AVR 1.8V
IC4018
C0CBCAC00275
AVR 1.8V
IC4019
C1AB00002456
10bit A/D(ADV7499)
Q4053
B1ABDF000034
Q4055
2SA2077O0L
Q4056
2SA2077O0L
Q4057
2SA2077O0L
Q4058
2SA2077O0L
Q4059
2SA2077O0L
Q4050
B1ABDF000034
Q4061
B1ABDF000034
Q4062
B1ABDF000034
Q4063
B1ABDF000034
Q4064
B1ABDF000034
MAIN5V
MAIN3.3V
MAIN9V
MAIN1.8V
SUB9V
SUB5V
TP4029
TP4030
TP4028
EURO_TEXT
RGB_CVBS
PC_G
PC_B
PC_R
MAIN_PR
MAIN_PB/C
MAIN_Y/CVBS
PR
PB/C
Y
UVIN7
UVIN1
UVIN8
UVIN9
YIN0
YIN1
YIN2
YIN3
YIN4
YIN5
HSIA
SYS_RST(L_3.3V)
JTAG_TMS
JTAG_BA_FS
JTAG_GC5_BA
TV_MAIN_ON
GC_RST
PC_VS
PC_HS
SDA2
SCL2
VSIA
EXB28V220JX
71
72
73
51
52
53
54
55
56
57
58
59
60
76
77
78
79

TH-50PV60A DG-Board (4 of 8) Schematic Diagram


DG-BOARD (5/8)
TNPA3756CP
IC4026
C1AB00002535
HDMI I/F RECEIVER
SII9023CTU-L
Thermal Pad
IC4027
C0DBFFD00003
MAIN 1.8V
IC4025
C0FBBK000047
AUDIO DAC
IC4028
C0ABBB000230
AUDIO AMP
*IC4023
TVRN917
EEPROM
*IC4022
TVRN916
EEPROM
DG9
HDMI IN 1
*DG8
HDMI IN 2
Q4066
B1ABDF000034
Q4067
B1ABDF000034
*Q4068
B1ABDF000034
*Q4065
B1ABDF000034
Q4069
B1ABDF000034
*Q4084
B1ABDF000034
Q4070
B1MBACA00008
*Q4071
B1MBACA00008
Q4082
2SK1228OOL
*Q4083
2SK1228OOL
D4049
B0HCMM000014
D4050
B0HCMM000014
*D4051
B0HCMM000014
*D4052
B0HCMM000014
D4047
MAZ30560ML
*D4048
MAZ30560ML
HDMI_5V_DET1
HDMI_5V_DET2
DDC_SDA0
DDC_SCL0
MAIN5V
MAIN3.3V
MAIN1.8V
MAIN9V
HPD1
HPD2
HDMI_SCL
HDMI_SDA
SCL1
SDA1
DIGITAL VIDEO SIGNAL (HDMI)
HDMI_VS
HDMI_HS
HDMI_DE
VSIB
HSIB
AP_DE
YBIN0
YBIN1
UBIN0
UBIN1
HDMI_Y0
HDMI_Y1
HDMI_Y2
HDMI_Y3
HDMI_Y4
HDMI_Y5
HDMI_Y6
HDMI_Y7
YBIN2
YBIN3
YBIN4
YBIN5
YBIN6
YBIN7
YBIN8
YBIN9
HDMI_CLK
CLKINB2
HDMI_UV0
HDMI_UV1
HDMI_UV2
HDMI_UV3
HDMI_UV4
HDMI_UV5
HDMI_UV6
HDMI_UV7
UBIN2
UBIN3
UBIN4
UBIN5
UBIN6
UBIN7
UBIN8
UBIN9
HDMI_INT
HDMI_RST
HDMI_DAC_PD
REFCK_HDMI
HDMI_L_AUDIO
HDMI_R_AUDIO
HDMI_L
HDMI_R
HDMI_CEC
HDMI_WP
RX_MCLK
RX_SCK
RX_SD0#
RX_WS
HIGH:MUTE
VIH > 2.2V
VIL < 0.8V
MCLK
BICK
SDTI
LRCK
PDN
SMUTE/CSN
ACKS/CCLK
DIF0/CDTI
DZFL
DZFR
VDD
VSS
VCOM
AOUTL
AOUTR
P/S
HPDT
+5V
DDCG
SDA
SCL
N.C.
CEC
CLK-
CLKG
CLK+
D0-
D0G
D0+
D1-
D1G
D1+
D2-
D2G
D2+
VCC
WC
E0
E1
E2
VSS
R0XC-
R0XC+
R0X0-
R0X0+
R0X1-
R0X1+
R0X2-
R0X2+
R1XC-
R1XC+
R1X0-
R1X0+
R1X1-
R1X1+
AVCC
AGND
TMDSPGND
PVCC1
RSVD_A
CVCC18
CGND
IOVCC
IOGND
VSYNC
HSYNC
DE
ODCK
CLK48B
RESET#
SCDT
INT
XTALIN
XTALOUT
SPDIF
JS4104
JS4025
JS4026
R4641
EXB28V330JX
R4665
EXB2HV220JV
R4667
EXB2HV220JV
R4669
EXB2HV220JV
L
R

TH-50PV60A DG-Board (5 of 8) Schematic Diagram

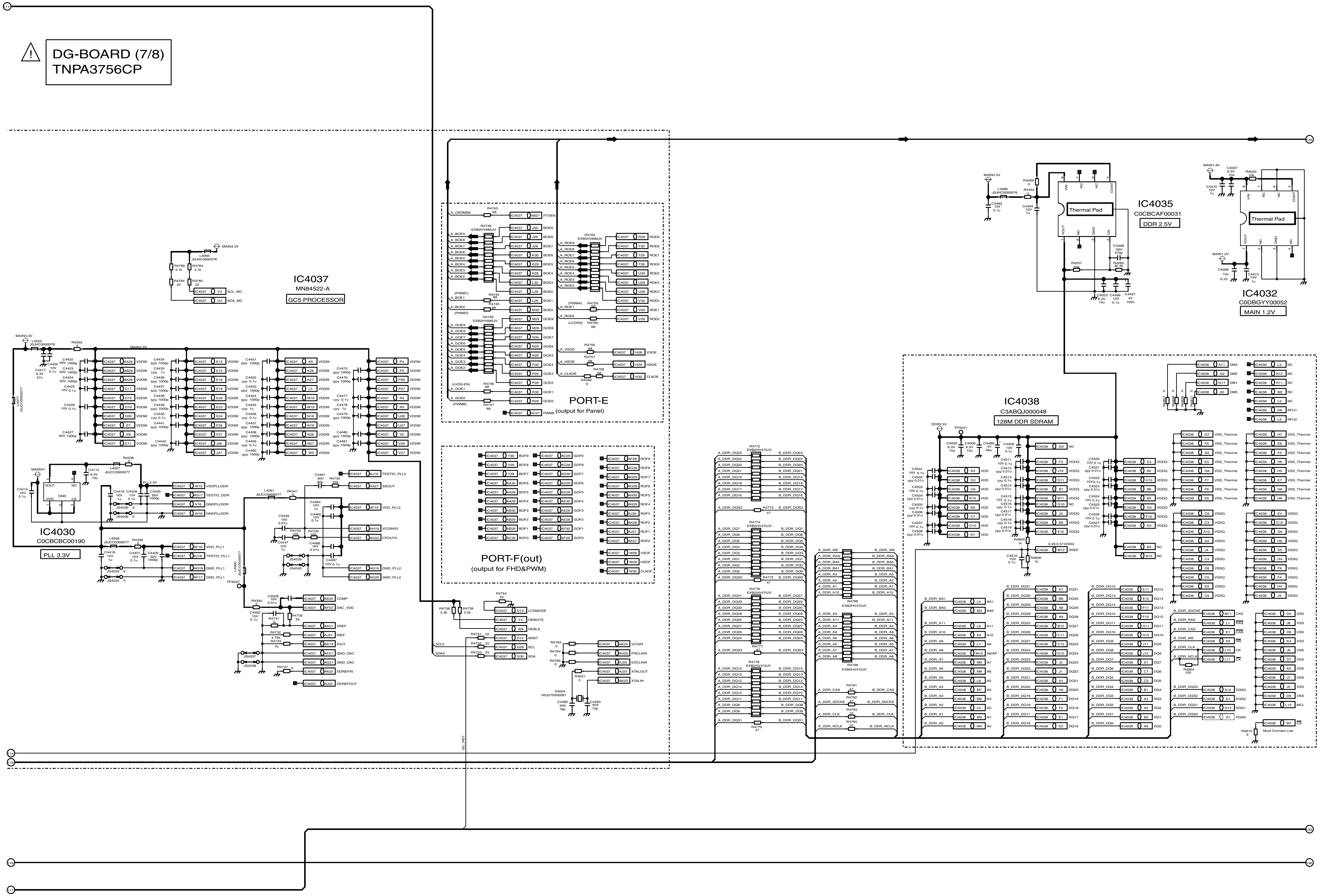
TH-50PV60A DG-Board (5 of 8) Schematic Diagram


DG-BOARD (6/8)
TNPA3756CP
PORT-FHQ(GC3E&HQ1)
PORT-D(OSD INPUT)
PORT-C(PEAKS)
PORT-B(FS&HDMI)
PV60A ONLY
PORT-A(ADV7499)
MN84522-A
MAIN1.2V
MAIN3.3V
DDR2.5V
IC4029
C0CBCAC00282
DLL 2.5V
IC4037
MN84522-A
GC5 PROCESSOR
46
47
48
49
50
51
52
53
54

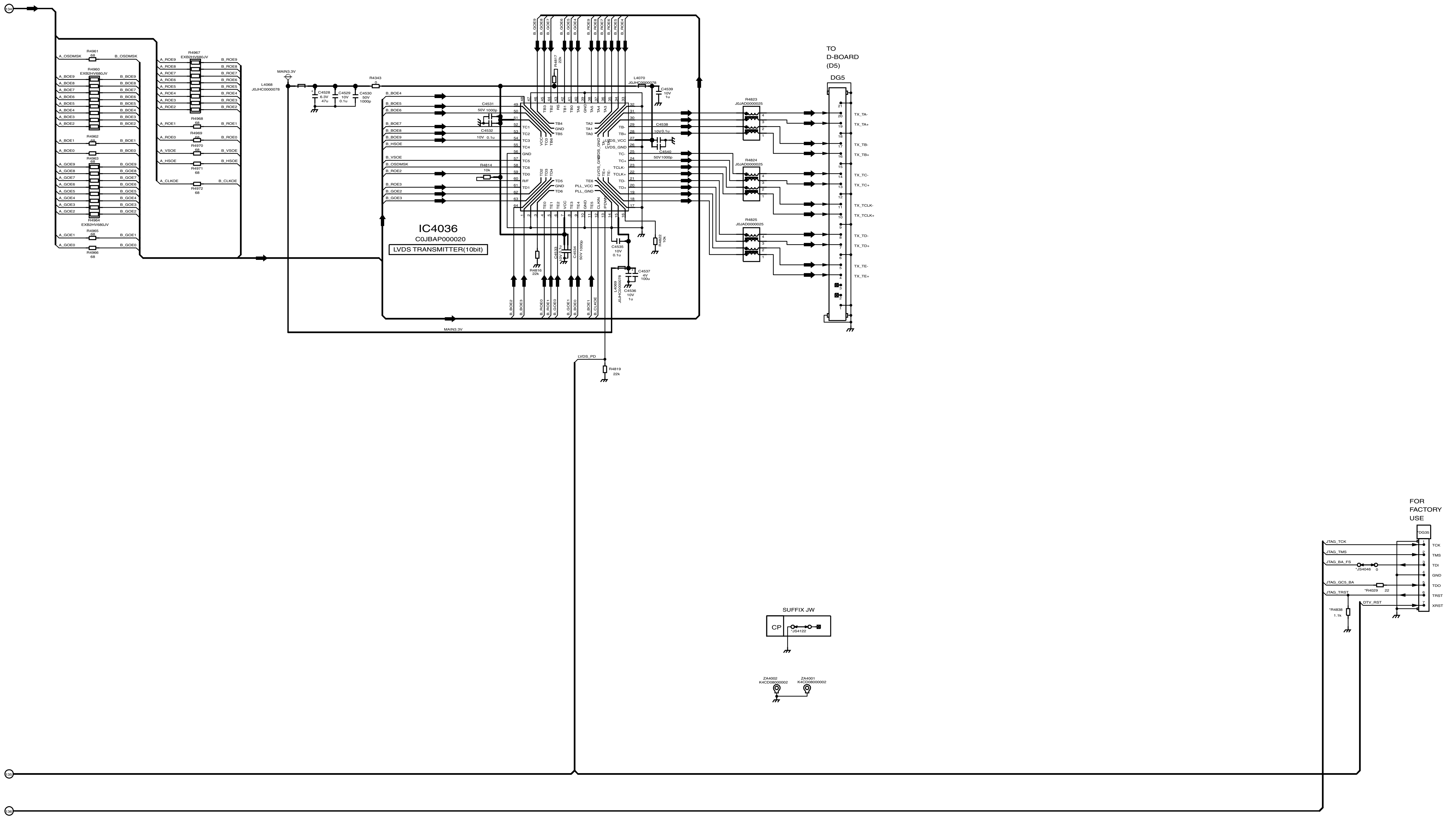
TH-50PV60A DG-Board (6 of 8) Schematic Diagram

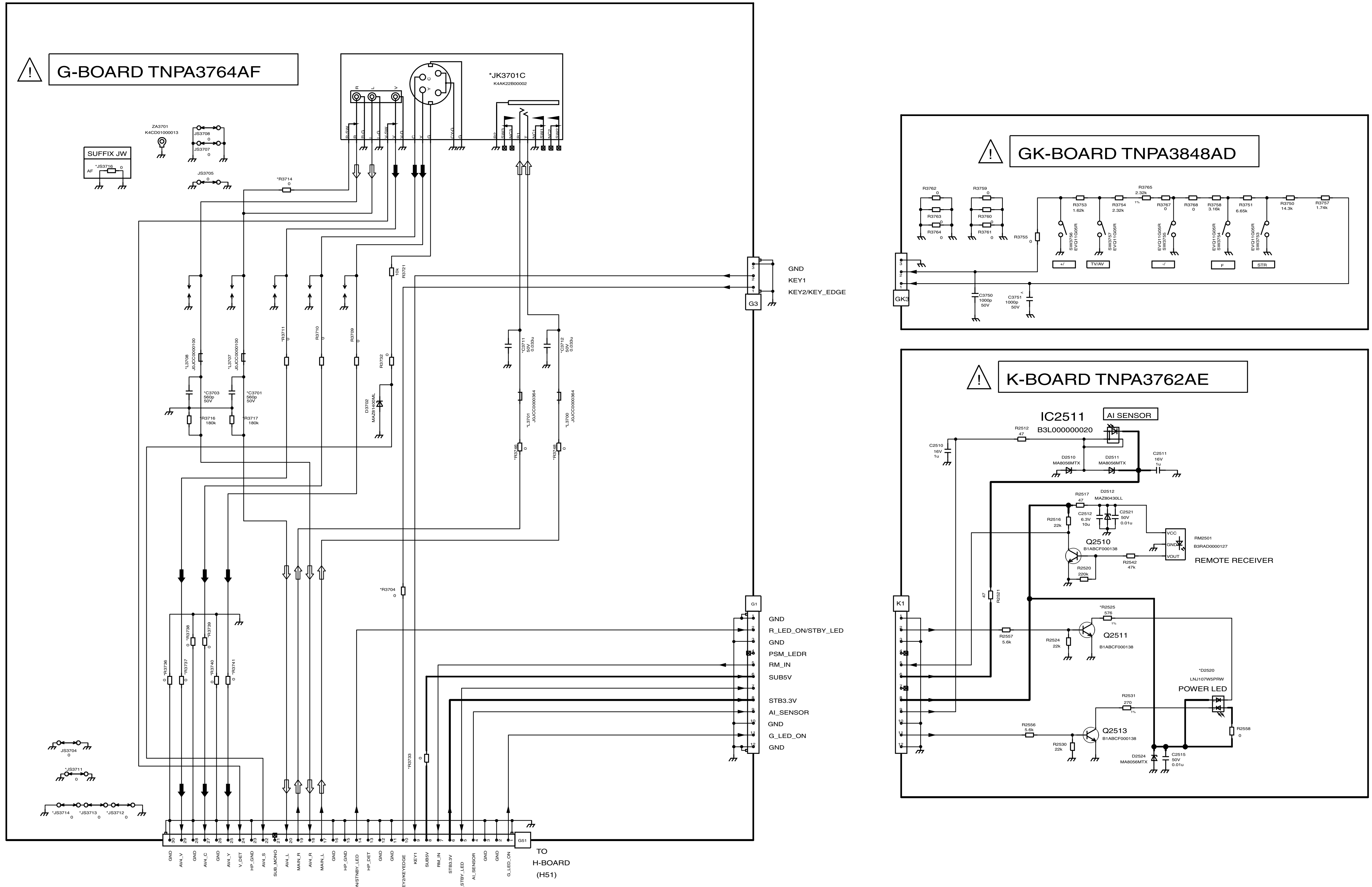
TH-50PV60A DG-Board (6 of 8) Schematic Diagram

DG-BOARD (7/8)
TNPA3756CP


IC4037
MN84522-A
GC5 PROCESSOR
IC4030
C0CBCBC00190
PLL 3.3V
PORT-E
(output for Panel)
PORT-F(out)
(output for FHD&PWM)
IC4035
C0CBCAF00031
DDR 2.5V
Thermal Pad
IC4032
C0DBGYY00052
MAIN 1.2V
IC4038
C3ABQJ000048
128M DDR SDRAM
MAIN3.3V
MAIN1.8V
MAIN1.2V
MAIN5V
DDR2.5V
PLL3.3V

⚠ DG-BOARD (8/8)
TNPA3756CP

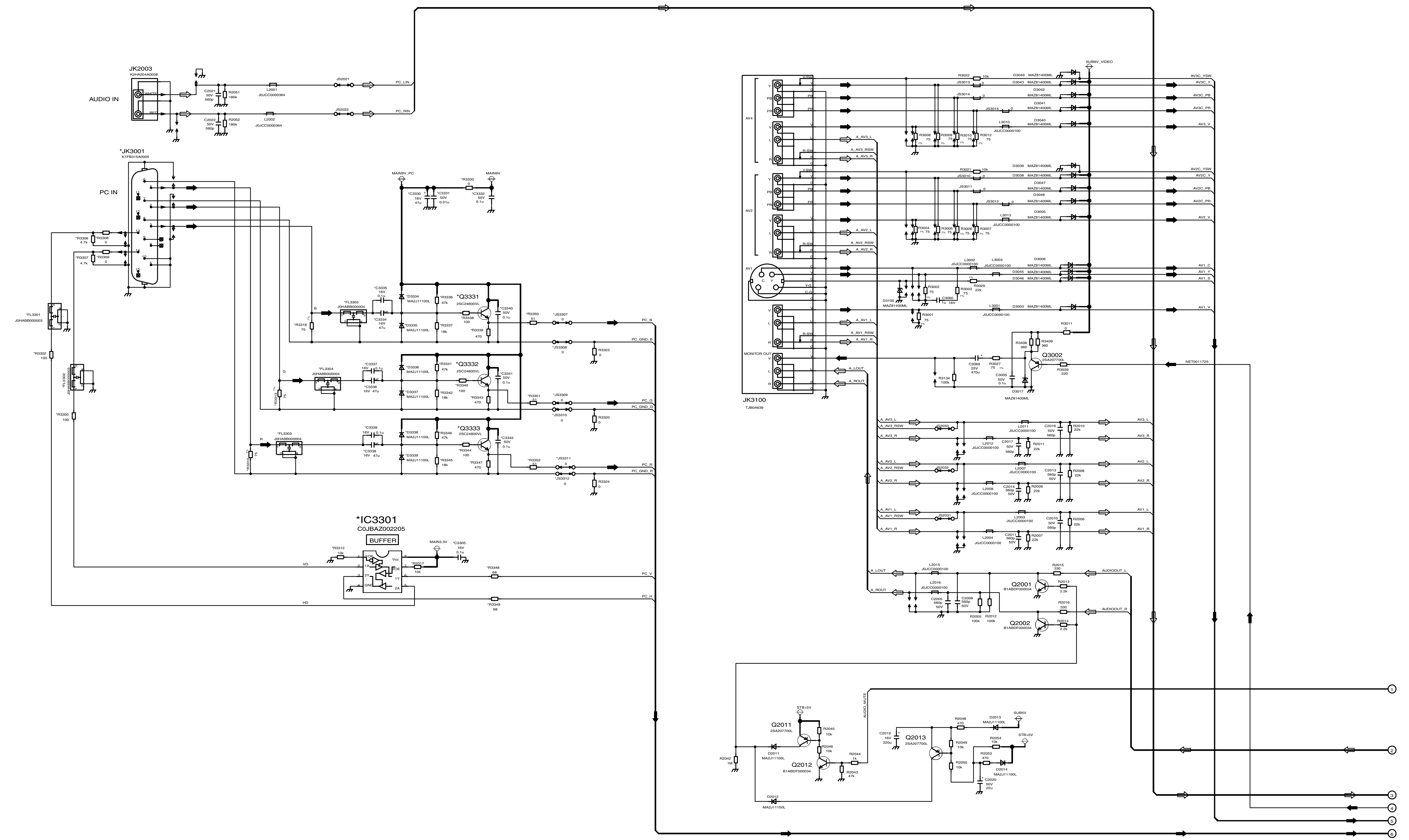

134
135
136
A_OSDMSK
R4961
68
B_OSDMSK
R4960
EXB2HV680JV
A_BOE9
A_BOE8
A_BOE7
A_BOE6
A_BOE5
A_BOE4
A_BOE3
A_BOE2
B_BOE9
B_BOE8
B_BOE7
B_BOE6
B_BOE5
B_BOE4
B_BOE3
B_BOE2
R4962
68
A_BOE1
B_BOE1
A_BOE0
B_BOE0
R4963
68
A_GOE9
A_GOE8
A_GOE7
A_GOE6
A_GOE5
A_GOE4
A_GOE3
A_GOE2
B_GOE9
B_GOE8
B_GOE7
B_GOE6
B_GOE5
B_GOE4
B_GOE3
B_GOE2
R4964
EXB2HV680JV
R4965
68
A_GOE1
B_GOE1
A_GOE0
B_GOE0
R4966
68
R4967
EXB2HV680JV
A_ROE9
A_ROE8
A_ROE7
A_ROE6
A_ROE5
A_ROE4
A_ROE3
A_ROE2
B_ROE9
B_ROE8
B_ROE7
B_ROE6
B_ROE5
B_ROE4
B_ROE3
B_ROE2
R4968
68
A_ROE1
B_ROE1
R4969
68
A_ROE0
B_ROE0
R4970
68
A_VSOE
B_VSOE
A_HSOE
B_HSOE
R4971
68
A_CLKOE
B_CLKOE
R4972
68
MAIN3.3V
L4068
J0JHC0000078
C4528
6.3V
47u
C4529
10V
0.1u
C4530
50V
1000p
R4343
0
B_BOE4
B_BOE5
B_BOE6
B_BOE7
B_BOE8
B_BOE9
B_HSOE
B_VSOE
B_OSDMSK
B_ROE2
B_ROE3
B_GOE2
B_GOE3
C4531
50V 1000p
C4532
10V 0.1u
R4814
10k
B_GOE9
B_GOE8
B_GOE7
B_GOE6
B_GOE5
B_GOE4
B_ROE9
B_ROE8
B_ROE7
B_ROE6
B_ROE5
B_ROE4
R4817
22k
L4070
J0JHC0000078
C4539
10V
1u
TB3
TB2
RS
TB1
TB0
TA6
GND
TA5
TA4
TA3
TB4
GND
TB5
VCC
TC0
TB6
TC1
TC2
TC3
TC4
GND
TC5
TC6
TD0
R/F
TD1
TA2
TA1
TA0
LVDS_GND
TA-
TA+
LVDS_VCC
LVDS_GND
TB-
TB+
TC-
TC+
TCLK-
TCLK+
TD-
TD+
LVDS_GND
TE+
TE-
TE6
PLL_VCC
PLL_GND
TD2
TD3
TD4
TD5
GND
TD6
TE0
TE1
TE2
VCC
TE3
TE4
GND
TE5
CLKIN
/PDWN
C4538
10V 0.1u
C4540
50V 1000p
IC4036
C0JBAP000020
LVDS TRANSMITTER(10bit)
R4816
22k
C4533
10V 0.1u
C4534
50V 1000p
C4535
10V
0.1u
R4822
10k
C4537
4V
100u
L4069
J0JHC0000078
C4536
10V
1u
B_BOE2
B_BOE3
B_ROE0
B_ROE1
B_GOE0
B_GOE1
B_BOE0
B_BOE1
B_CLKOE
MAIN3.3V
LVDS_PD
R4819
22k
R4823
J0JAD0000025
R4824
J0JAD0000025
R4825
J0JAD0000025
TO
D-BOARD
(D5)
DG5
TX_TA-
TX_TA+
TX_TB-
TX_TB+
TX_TC-
TX_TC+
TX_TCLK-
TX_TCLK+
TX_TD-
TX_TD+
TX_TE-
TX_TE+
SUFFIX JW
CP
*JS4122
ZA4002
K4CD08000002
ZA4001
K4CD08000002
FOR
FACTORY
USE
*DG35
JTAG_TCK
JTAG_TMS
JTAG_BA_FS
*JS4046
0
JTAG_GC5_BA
*R4029
22
JTAG_TRST
*R4838
1.1k
DTV_RST
TCK
TMS
TDI
GND
TDO
TRST
XRST


G-BOARD TNPA3764AF
*JK3701C
K4AK22B00002
ZA3701
K4CD01000013
SUFFIX JW
AF
*JS3716
JS3708
JS3707
JS3705
*R3714
R3721
*R3711
R3710
R3709
R3732
D3702
MA2B1400ML
*L3708
J0JCC0000100
*L3707
J0JCC0000100
*C3703
560p
50V
*C3701
560p
50V
*R3716
180k
*R3717
180k
*C3711
50V
0.033u
*C3712
50V
0.033u
*L3701
J0JCC0000364
*L3700
J0JCC0000364
*R3746
*R3748
*R3704
*R3733
*R3736
*R3737
*R3738
*R3739
*R3740
*R3741
JS3704
*JS3711
*JS3714
*JS3713
*JS3712
GND
KEY1
KEY2/KEY_EDGE
G3
G1
GND
R_LED_ON/STBY_LED
GND
PSM_LEDR
RM_IN
SUB5V
STB3.3V
AI_SENSOR
GND
G_LED_ON
GND
G51
TO
H-BOARD
(H51)
GND
AV4_V
GND
AV4_C
GND
AV4_Y
V_DET
HP_GND
AV4_S
SUB_MONO
AV4_L
MAIN_R
AV4_R
MAIN_L
GND
HP_GND
R_LED_ON/STNBY_LED
HP_DET
GND
GND
PSM_LEDR/KEY2/KEYEDGE
KEY1
SUB5V
RM_IN
STB3.3V
MODEM_LED/KEY3/Active_STBY_LED
AI_SENSOR
GND
GND
G_LED_ON
GK-BOARD TNPA3848AD
R3762
R3763
R3764
R3759
R3760
R3761
R3755
R3753
1.62k
R3754
2.32k
R3765
2.32k
R3767
R3768
R3758
3.16k
R3751
6.65k
R3750
14.3k
R3757
1.74k
SW3756
EVQ11G05R
SW3757
EVQ11G05R
EVQ11G05R
SW3755
EVQ11G05R
SW3754
EVQ11G05R
SW3753
+/
TV/AV
-/
F
STR
GK3
C3750
1000p
50V
C3751
1000p
50V
K-BOARD TNPA3762AE
IC2511
B3L000000020
AI SENSOR
C2510
16V
1u
R2512
47
D2510
MA8056MTX
D2511
MA8056MTX
C2511
16V
1u
R2517
47
D2512
MAZ80430LL
C2512
6.3V
10u
C2521
50V
0.01u
R2516
22k
Q2510
B1ABCF000138
R2520
220k
R2542
47k
RM2501
B3RAD0000127
VCC
GND
VOUT
REMOTE RECEIVER
K1
R2521
47
*R2525
576
R2557
5.6k
R2524
22k
Q2511
B1ABCF000138
*D2520
LNJ107W5PRW
POWER LED
R2531
270
R2556
5.6k
R2530
22k
Q2513
B1ABCF000138
D2524
MA8056MTX
C2515
50V
0.01u
R2558
A
B
C
D
E
1
2
3
4
5
6
7
8

TH-50PV60A
G, GK, and K-Board Schematic Diagram

TH-50PV60A
G, GK, and K-Board Schematic Diagram

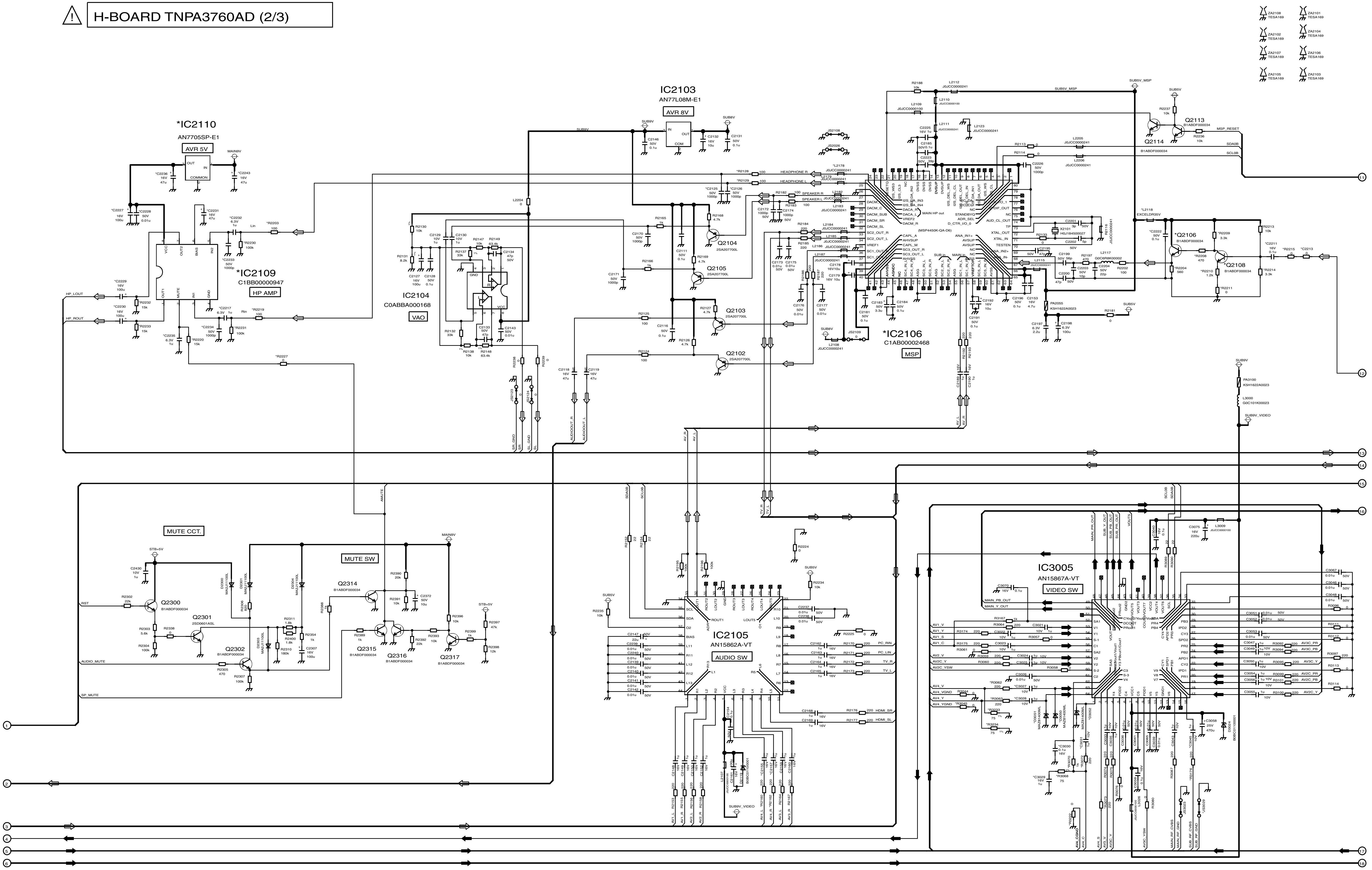
⚠ H-BOARD TNPA3760AD (1/3)


JK2003
K2HA204A0038
AUDIO IN
WHITE
RED
JS2021
JS2022
PC_LIN
PC_RIN
L2001
L2002
*JK3001
K1FB315A0005
PC IN
MAIN9V_PC
MAIN9V
*Q3331
2SC24800VL
*Q3332
2SC24800VL
*Q3333
2SC24800VL
*FL3301
*FL3302
*FL3303
*FL3304
*FL3305
PC_B
PC_GND_B
PC_G
PC_GND_G
PC_R
PC_GND_R
*IC3301
C0JBAZ002205
BUFFER
MAIN3.3V
VD
HD
PC_V
PC_H
AV4
AV2
AV1
MONITOR OUT
JK3100
TJB0A639
SUB9V_VIDEO
AV3C_YSW
AV3C_Y
AV3C_PB
AV3C_PR
AV3_V
AV2C_YSW
AV2C_Y
AV2C_PB
AV2C_PR
AV2_V
AV1_C
AV1_Y
AV1_S
AV1_V
Q3002
2SA207700L
NET0011725
A_AV3_L
A_AV3_RSW
A_AV3_R
A_AV2_L
A_AV2_RSW
A_AV2_R
A_AV1_L
A_AV1_RSW
A_AV1_R
A_LOUT
A_ROUT
AV3_L
AV3_R
AV2_L
AV2_R
AV1_L
AV1_R
Q2001
B1ABDF000034
Q2002
B1ABDF000034
AUDIOOUT_L
AUDIOOUT_R
AUDIO_MUTE
Q2011
2SA207700L
Q2012
B1ABDF000034
Q2013
2SA207700L
STB+5V
SUB5V
①
②
③
④
⑤
⑥

TH-50PV60A H-Board (1 of 3) Schematic Diagram

TH-50PV60A H-Board (1 of 3) Schematic Diagram

H-BOARD TNPA3760AD (2/3)

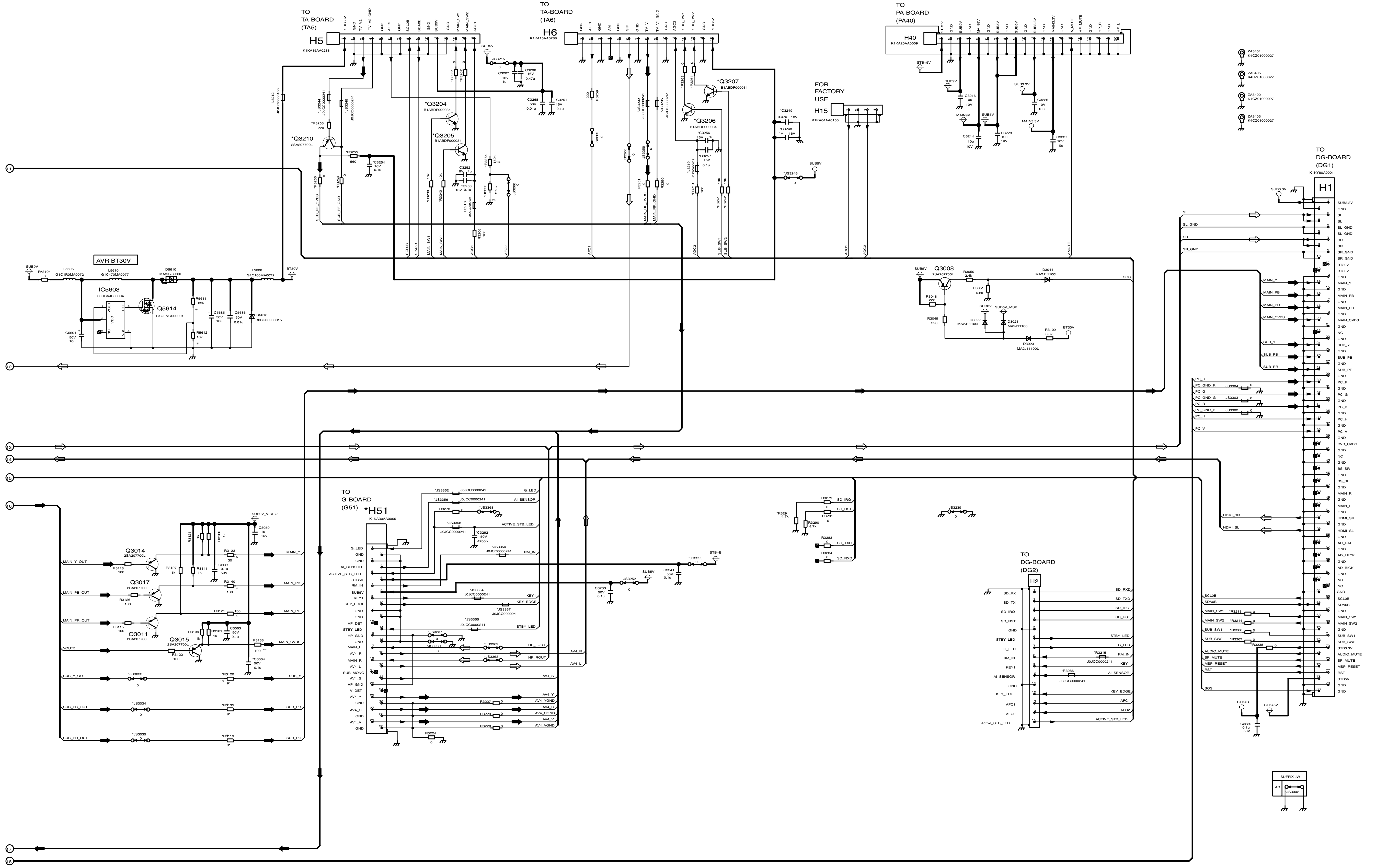


*IC2110
AN7705SP-E1
AVR 5V
IC2103
AN77L08M-E1
AVR 8V
*IC2109
C1BB00000947
HP AMP
IC2104
C0ABBA000168
VAO
*IC2106
C1AB00002468
MSP
Q2113
Q2114
Q2106
Q2108
Q2104
Q2105
Q2103
Q2102
MUTE CCT.
MUTE SW
Q2300
Q2301
Q2302
Q2314
Q2315
Q2316
Q2317
IC2105
AN15862A-VT
AUDIO SW
IC3005
AN15867A-VT
VIDEO SW
HP_LOUT
HP_ROUT
RST
AUDIO_MUTE
SP_MUTE
HEADPHONE R
HEADPHONE L
SPEAKER R
SPEAKER L
MSP_RESET
SDA08
SCL08
SUB5V_MSP
SUB8V
SUB9V
SUB5V
MAIN9V
STB+5V
SUB9V_VIDEO
AUDIOOUT_R
AUDIOOUT_L
AV_R
AV_L
TV_R
TV_L
PC_RIN
PC_LIN
HDMI_SR
HDMI_SL
AV1_V
AV1_Y
AV1_S
AV1_C
AV2_V
AV2C_Y
AV2C_YSW
AV4_V
AV4_VGND
AV4_Y
AV4_YGND
AV3C_PR
AV3C_PB
AV3C_Y
AV2C_PR
AV2C_PB
AV2C_Y
MAIN_PB_OUT
MAIN_Y_OUT
ZA2108 TESA169
ZA2101 TESA169
ZA2102 TESA169
ZA2104 TESA169
ZA2107 TESA169
ZA2106 TESA169
ZA2105 TESA169
ZA2103 TESA169

TH-50PV60A H-Board (2 of 3) Schematic Diagram

TH-50PV60A H-Board (2 of 3) Schematic Diagram

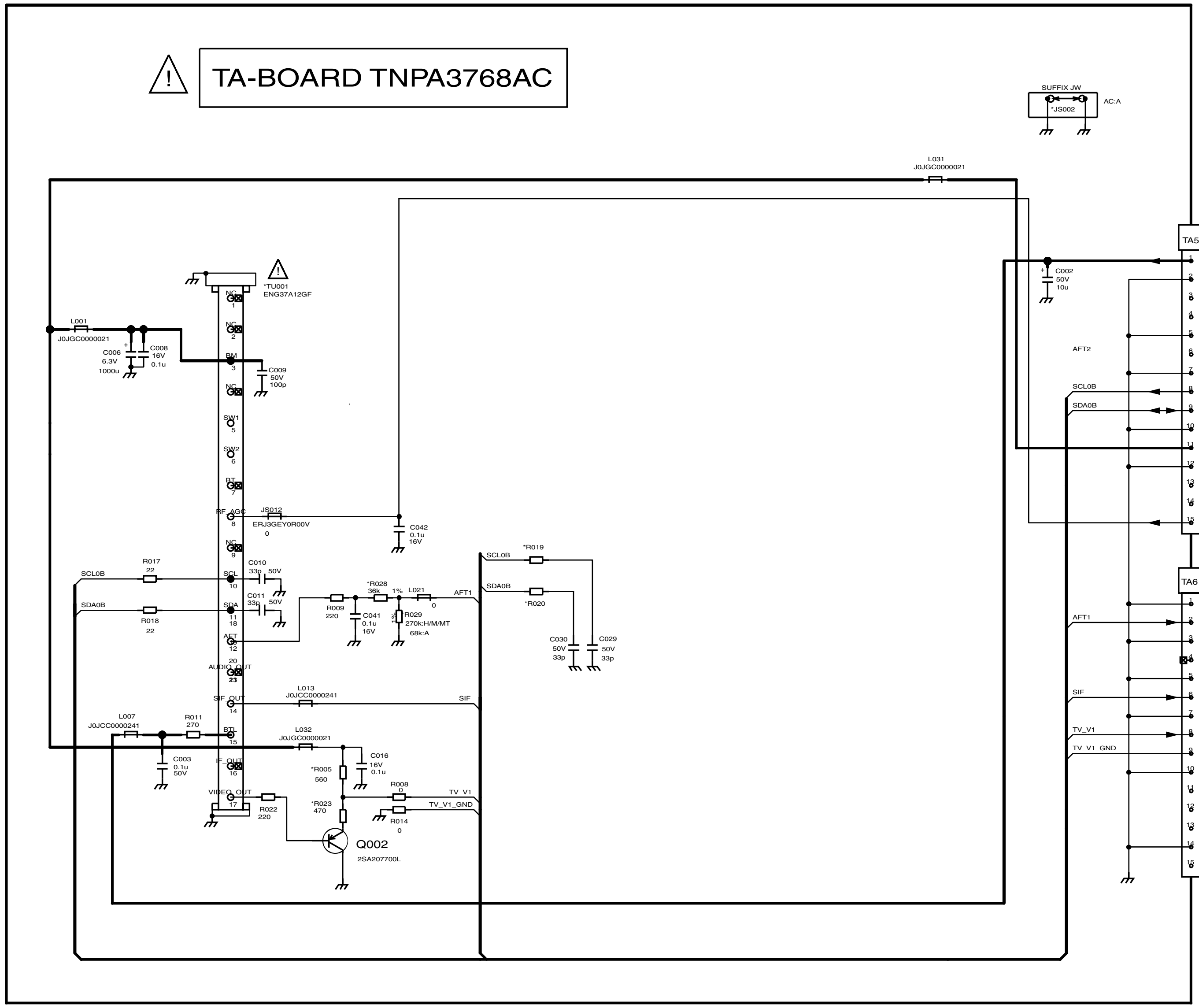
⚠ H-BOARD TNPA3760AD (3/3)



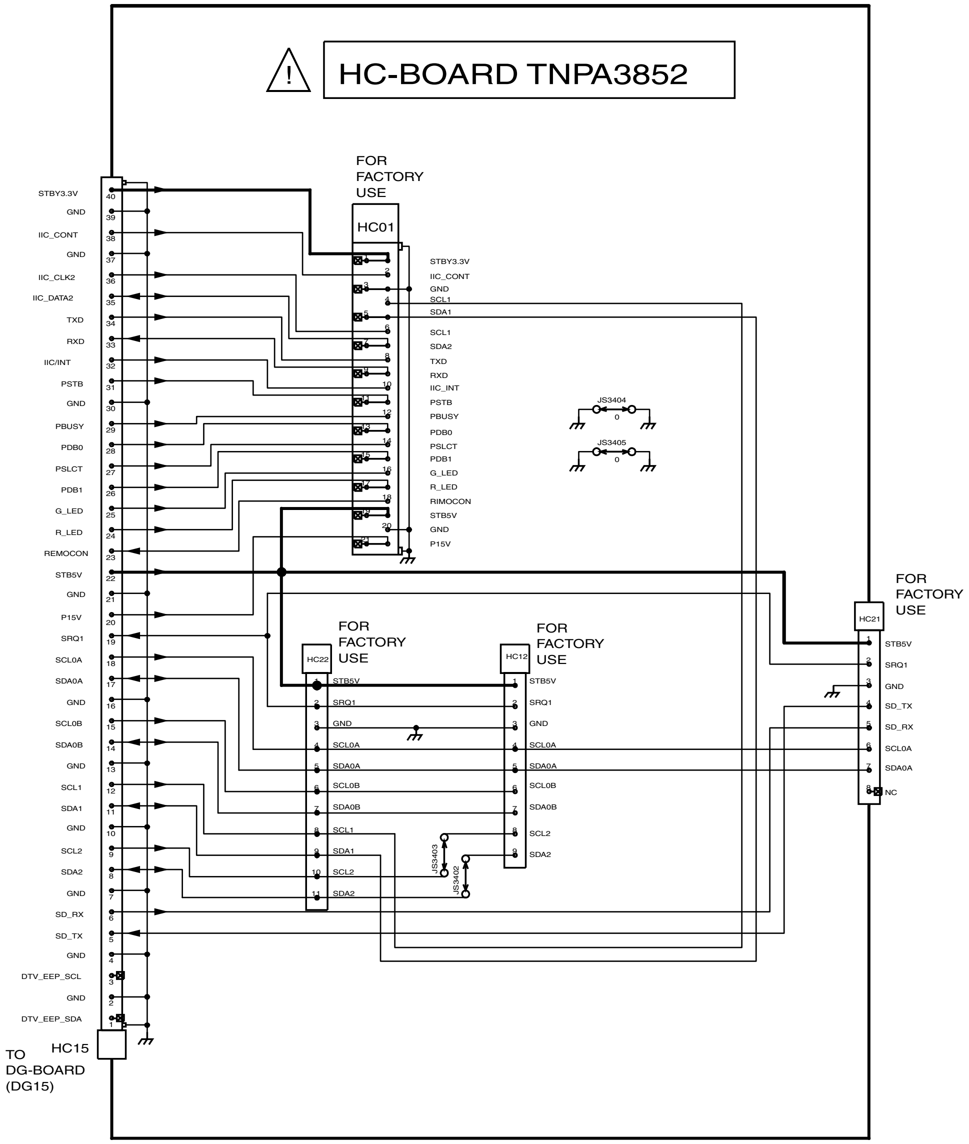
TO TA-BOARD (TA5)
H5
K1KA15AA0288
TO TA-BOARD (TA6)
H6
K1KA15AA0288
TO PA-BOARD (PA40)
H40
K1KA20AA0009
FOR FACTORY USE
H15
K1KA04AA0150
TO DG-BOARD (DG1)
H1
K1KY80A00011
*Q3210
2SA2070OL
*Q3204
B1ABDF000034
*Q3205
B1ABDF000034
*Q3207
B1ABDF000034
*Q3206
B1ABDF000034
AVR BT30V
IC5603
C0DBAJB00004
Q5614
B1CFNG000001
D5610
MA3X78900L
D5618
B0BC03900015
Q3008
2SA2070OL
D3044
MA2J11100L
D3022
MA2J11100L
D3021
MA2J11100L
D3023
MA2J11100L
Q3014
2SA2070OL
Q3017
2SA2070OL
Q3011
2SA2070OL
Q3015
2SA2070OL
TO G-BOARD (G51)
*H51
K1KA30AA0009
TO DG-BOARD (DG2)
H2
ZA3401
ZA3405
ZA3402
ZA3403
K4CZ01000027
SUFFIX JW
AD
JS3002
SUB9V
SUB5V
SUB3.3V
STB+5V
STB+B
BT30V
MAIN9V
MAIN3.3V
SUB9V_VIDEO
SOS
MAIN_Y
MAIN_PB
MAIN_PR
MAIN_CVBS
SUB_Y
SUB_PB
SUB_PR
MAIN_Y_OUT
MAIN_PB_OUT
MAIN_PR_OUT
VOUT5
SUB_Y_OUT
SUB_PB_OUT
SUB_PR_OUT
G_LED
AI_SENSOR
ACTIVE_STB_LED
RM_IN
KEY1
KEY_EDGE
STBY_LED
HP_LOUT
HP_ROUT
AV4_R
AV4_L
AV4_S
AV4_Y
AV4_YGND
AV4_C
AV4_CGND
AV4_V
AV4_VGND
SD_IRQ
SD_RST
SD_TXD
SD_RXD
SL
SL_GND
SR
SR_GND
PC_R
PC_GND_R
PC_G
PC_GND_G
PC_B
PC_GND_B
PC_H
PC_V
HDMI_SR
HDMI_SL
SCL0B
SDA0B
MAIN_SW1
MAIN_SW2
SUB_SW1
SUB_SW2
AUDIO_MUTE
SP_MUTE
MSP_RESET
RST
AFC1
AFC2
AGC1
AGC2
SUB_RF_CVBS
SUB_RF_GND
MAIN_RF_CVBS
MAIN_RF_GND
A_MUTE
11
12
13
14
15
16
17
18

TH-50PV60A H-Board (3 of 3) Schematic Diagram

TH-50PV60A H-Board (3 of 3) Schematic Diagram



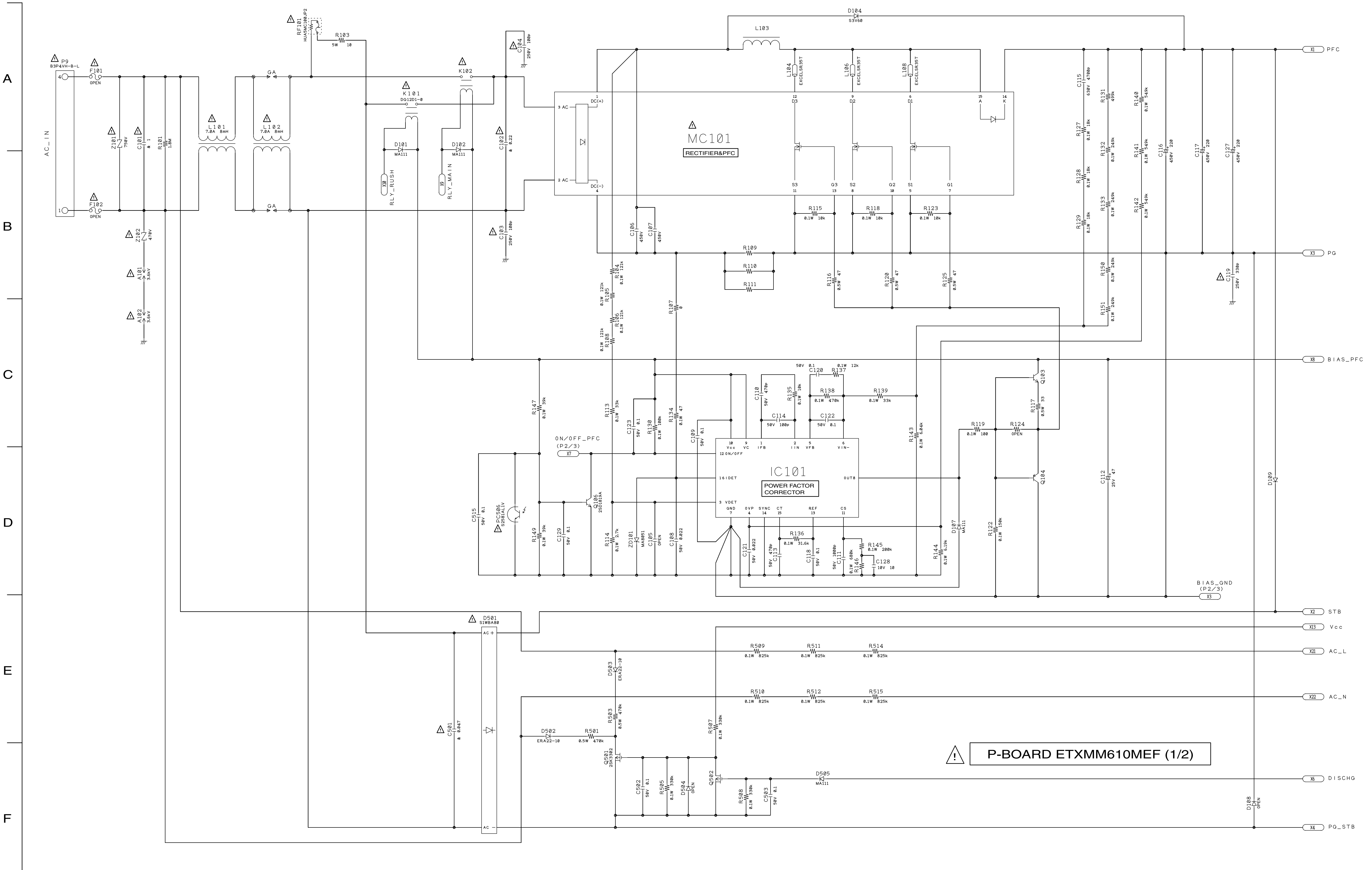
TA-BOARD TNPA3768AC
SUFFIX JW
*JS002
AC:A
L031
J0JGC0000021
TO
H-BOARD
(H5)
TA5
BT30V
GND
TV_V2
TV_V2_GND
GND
AFT2
GND
SCL0B
SDA0B
GND
SUB5V
GND
MAIN_SW1
MAIN_SW2
RFAGC1
C002
50V
10u
AFT2
SCL0B
SDA0B
*TU001
ENG37A12GF
L001
J0JGC0000021
C006
6.3V
1000u
C008
16V
0.1u
C009
50V
100p
NC
NC
BM
NC
SW1
SW2
BT
RF_AGC
NC
SCL
SDA
AFT
AUDIO_OUT
SIF_OUT
BTL
IF_OUT
VIDEO_OUT
JS012
ERJ3GEY0R00V
0
C042
0.1u
16V
R017
22
R018
22
SCL0B
SDA0B
C010
33p
50V
C011
33p
50V
R009
220
C041
0.1u
16V
*R028
36k
1%
L021
0
R029
270k:H/M/MT
68k:A
AFT1
SCL0B
*R019
SDA0B
*R020
C030
50V
33p
C029
50V
33p
L013
J0JCC0000241
SIF
L007
J0JCC0000241
R011
270
C003
0.1u
50V
L032
J0JGC0000021
C016
16V
0.1u
*R005
560
*R023
470
R022
220
R008
0
R014
0
TV_V1
TV_V1_GND
Q002
2SA207700L
TO
H-BOARD
(H6)
TA6
GND
AFT1
GND
NC
GND
SIF
GND
TV_V1
TV_V1_GND
GND
RFAGC2
SUB_SW1
SUB_SW2
GND
SUB5V
AFT1
SIF
TV_V1
TV_V1_GND



HC-BOARD TNPA3852
FOR
FACTORY
USE
HC01
STBY3.3V
IIC_CONT
GND
SCL1
SDA1
SCL1
SDA2
TXD
RXD
IIC_INT
PSTB
PBUSY
PDB0
PSLCT
PDB1
G_LED
R_LED
RIMOCON
STB5V
GND
P15V
JS3404
0
JS3405
0
STBY3.3V
GND
IIC_CONT
GND
IIC_CLK2
IIC_DATA2
TXD
RXD
IIC/INT
PSTB
GND
PBUSY
PDB0
PSLCT
PDB1
G_LED
R_LED
REMOCON
STB5V
GND
P15V
SRQ1
SCL0A
SDA0A
GND
SCL0B
SDA0B
GND
SCL1
SDA1
GND
SCL2
SDA2
GND
SD_RX
SD_TX
GND
DTV_EEP_SCL
GND
DTV_EEP_SDA
HC15
TO
DG-BOARD
(DG15)
FOR
FACTORY
USE
HC22
STB5V
SRQ1
GND
SCL0A
SDA0A
SCL0B
SDA0B
SCL1
SDA1
SCL2
SDA2
JS3403
JS3402
FOR
FACTORY
USE
HC12
STB5V
SRQ1
GND
SCL0A
SDA0A
SCL0B
SDA0B
SCL2
SDA2
FOR
FACTORY
USE
HC21
STB5V
SRQ1
GND
SD_TX
SD_RX
SCL0A
SDA0A
NC

TH-50PV60A
HC and TA-Board Schematic Diagram

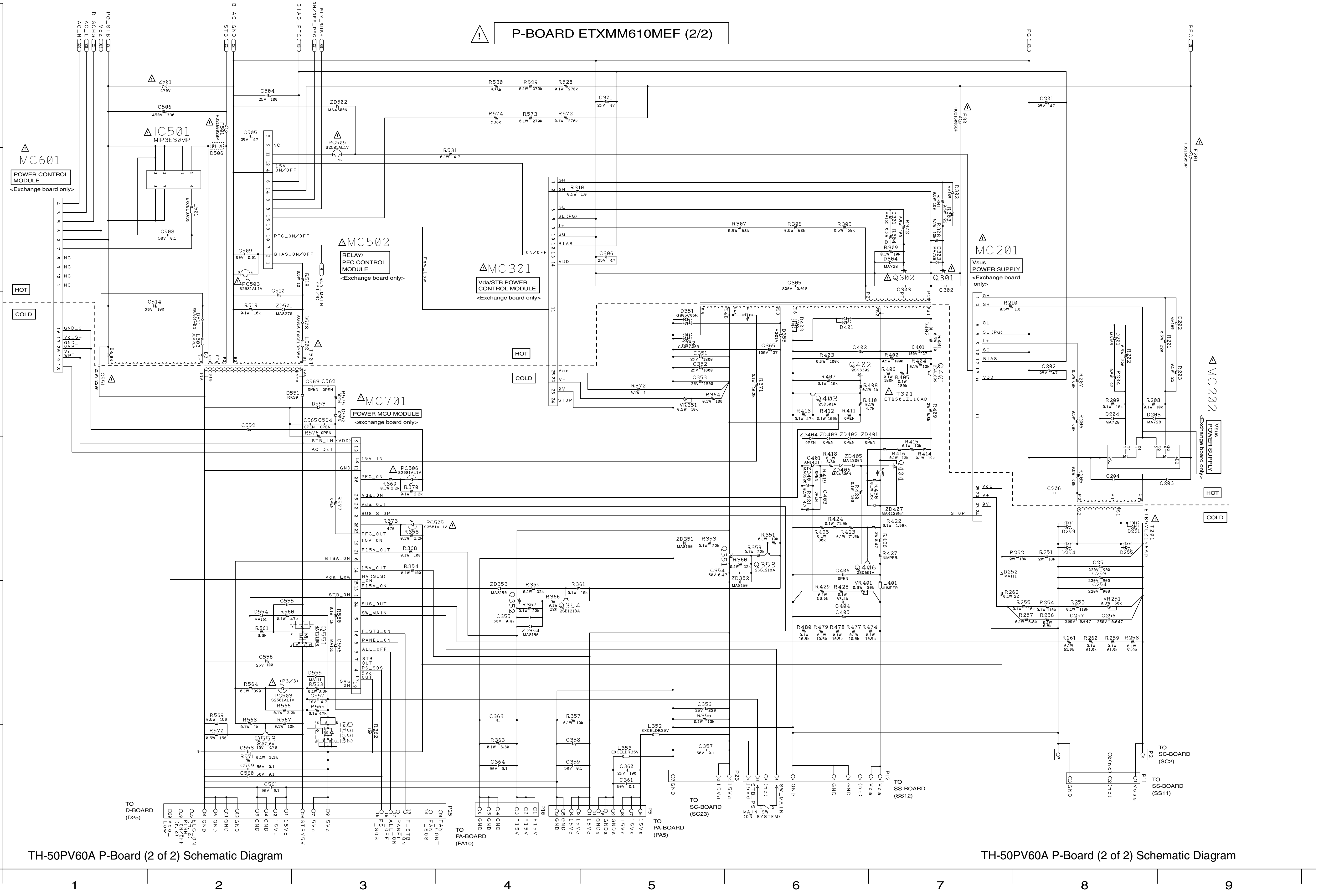
TH-50PV60A
HC and TA-Board Schematic Diagram


A
B
C
D
E
F
P9
B3P4VH-B-L
AC_IN
F101
OPEN
F102
OPEN
Z101
750V
C101
1
R101
1.8M
Z102
470V
A101
3.6kV
A102
3.6kV
L101
7.0A 8mH
L102
7.0A 8mH
GA
GA
RF101
HUA5MC100JP2
R103
5W 10
K101
DG12D1-0
K102
D101
MA111
D102
MA111
X10
RLY_RUSH
X9
RLY_MAIN
C104
250V 100p
C102
0.22
C103
250V 100p
MC101
RECTIFIER&PFC
3 AC
2 AC
DC(+)
DC(-)
L103
D104
S3V60
L104
EXCELSR35T
L106
EXCELSR35T
L108
EXCELSR35T
D3
D2
D1
S3
G3
S2
G2
S1
G1
R115
0.1W 10k
R118
0.1W 10k
R123
0.1W 10k
R116
0.5W 47
R120
0.5W 47
R125
0.5W 47
C106
450V
C107
450V
R109
R110
R111
R104
0.1W 121k
R105
0.1W 121k
R106
0.1W 121k
R108
0.1W 121k
R107
0
C115
630V 4700p
R131
0.1W 499k
R127
0.1W 18k
R128
0.1W 18k
R129
0.1W 18k
R132
0.1W 249k
R133
0.1W 249k
R150
0.1W 249k
R151
0.1W 249k
R140
0.1W 549k
R141
0.1W 549k
R142
0.1W 549k
C116
450V 220
C117
450V 220
C127
450V 220
C119
250V 330p
X1 PFC
X3 PG
X8 BIAS_PFC
C120
50V 0.1
R137
0.1W 12k
C110
50V 470p
R135
0.1W 10k
R138
0.1W 470k
R139
0.1W 33k
C114
50V 100p
C122
50V 0.1
R147
0.1W 39k
R113
0.1W 33k
C123
50V 0.1
R130
0.1W 100k
R134
0.1W 47
C109
50V 0.1
ON/OFF_PFC
(P2/3)
X7
IC101
POWER FACTOR CORRECTOR
10 Vcc
9 VC
1 IFB
2 IIN
5 VFB
6 VIN-
12 ON/OFF
16 IDET
3 VDET
OUT 8
GND 7
OVP 4
SYNC 14
CT 15
REF 13
CS 11
R143
0.1W 6.04k
R119
0.1W 100
R124
OPEN
R117
0.5W 33
Q103
Q104
C112
25V 47
D109
C515
50V 0.1
PC506
S2581AL1V
R149
0.1W 39k
C129
50V 0.1
Q106
2SD1819A
R114
0.1W 2.7k
ZD101
MA8051
C105
OPEN
C108
50V 0.022
C121
50V 0.022
C113
50V 470p
R136
0.1W 31.6k
C118
50V 0.1
C111
50V 1000p
R146
0.1W 680k
R145
0.1W 200k
C128
10V 10
R144
0.1W 6.19k
D107
MA111
R122
0.1W 150k
BIAS_GND
(P2/3)
X3
D501
S1WBA80
AC +
AC −
X2 STB
X13 Vcc
R509
0.1W 825k
R511
0.1W 825k
R514
0.1W 825k
X21 AC_L
D503
ERA22-10
R510
0.1W 825k
R512
0.1W 825k
R515
0.1W 825k
X22 AC_N
C501
0.047
D502
ERA22-10
R501
0.5W 470k
R503
0.5W 470k
R507
0.1W 330k
Q501
2SK3382
C502
50V 0.1
R505
0.1W 330k
D504
OPEN
Q502
R508
0.1W 330k
C503
50V 0.1
D505
MA111
X6 DISCHG
D108
OPEN
X4 PG_STB
P-BOARD ETXMM610MEF (1/2)
1
2
3
4
5
6
7
8
9

TH-50PV60A P-Board (1 of 2) Schematic Diagram

TH-50PV60A P-Board (1 of 2) Schematic Diagram

⚠ P-BOARD ETXMM610MEF (2/2)

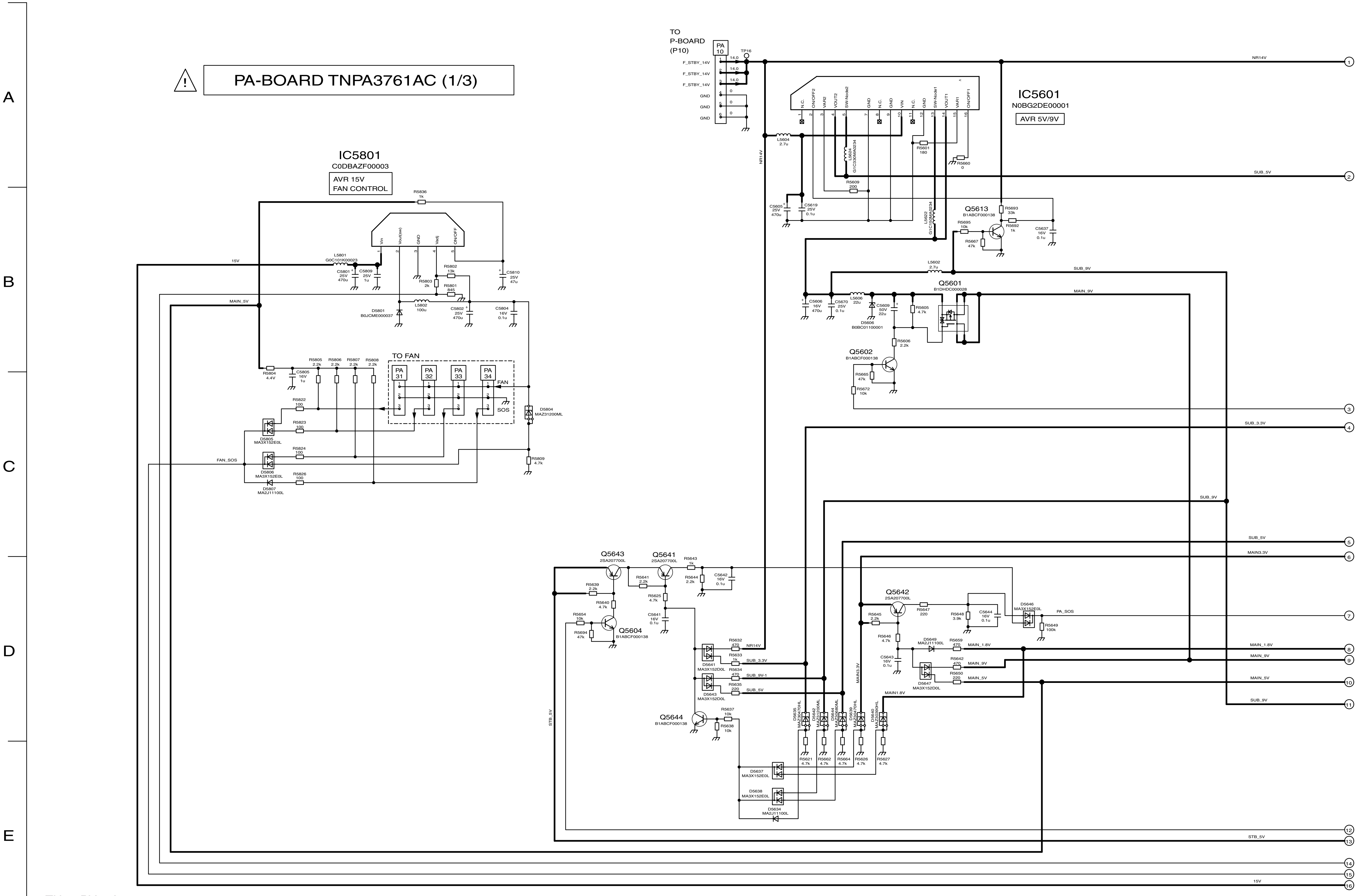


A
B
C
D
E
F
1
2
3
4
5
6
7
8
9
AC_N
AC_L
DISCHG
Vcc
PG_STB
BIAS_GND
STB
BIAS_PFC
ON/OFF_PFC
RLY_RUSH
PG
PFC
⚠ MC601
POWER CONTROL MODULE
<Exchange board only>
⚠ IC501
MIP3E30MP
⚠ MC502
RELAY/ PFC CONTROL MODULE
<Exchange board only>
⚠ MC301
Vda/STB POWER CONTROL MODULE
<Exchange board only>
⚠ MC201
Vsus POWER SUPPLY
<Exchange board only>
⚠ MC701
POWER MCU MODULE
<exchange board only>
⚠ MC202
Vsus POWER SUPPLY
<Exchange board only>
HOT
COLD
Z501
C504
C506
C505
C508
C509
C510
C514
C551
C552
C555
C556
C557
C558
C559
C560
C561
C562
C563
C564
C565
ZD501
ZD502
PC503
PC505
PC506
D506
D508
D551
D552
D553
D554
D555
D556
L501
L502
L503
T501
F501
R518
R519
R530
R529
R528
R531
R574
R573
R572
R560
R561
R562
R563
R564
R565
R566
R567
R568
R569
R570
R571
R575
R576
R577
R580
R362
Q551
Q552
Q553
C301
C302
C303
C305
C306
C351
C352
C353
C354
C355
C356
C357
C358
C359
C360
C361
C363
C364
C365
R301
R302
R303
R304
R305
R306
R307
R308
R309
R310
R351
R353
R354
R356
R357
R358
R359
R360
R361
R363
R364
R365
R366
R367
R368
R369
R370
R371
R372
R373
D301
D302
D303
D304
D351
D352
D355
ZD351
ZD352
ZD353
ZD354
VR351
Q301
Q302
Q351
Q352
Q353
Q354
L352
L353
T301
ETB50LZ116AD
C401
C402
C403
C404
C405
C406
R401
R402
R403
R404
R405
R406
R407
R408
R409
R410
R411
R412
R413
R414
R415
R416
R418
R419
R420
R421
R422
R423
R424
R425
R426
R427
R428
R429
R430
R474
R477
R478
R479
R480
D401
D402
D403
ZD401
ZD402
ZD403
ZD404
ZD405
ZD406
ZD407
IC401
AN1431T
Q401
Q402
Q403
Q404
Q406
VR401
L401
F301
F201
C201
C202
C203
C204
C206
C251
C253
C254
C256
C257
R201
R202
R203
R204
R205
R206
R207
R208
R209
R210
R251
R252
R254
R255
R256
R257
R258
R259
R260
R261
R262
D201
D202
D203
D204
D251
D252
D253
D254
D255
ZD252
VR251
T201
ETB57LZ156AD
TO D-BOARD (D25)
TO PA-BOARD (PA10)
TO PA-BOARD (PA5)
TO SC-BOARD (SC23)
TO SS-BOARD (SS12)
TO SC-BOARD (SC2)
TO SS-BOARD (SS11)
P25
P10
P5
P23
P12
P2
P11
MAIN SW (ON SYSTEM)

TH-50PV60A P-Board (2 of 2) Schematic Diagram

TH-50PV60A P-Board (2 of 2) Schematic Diagram

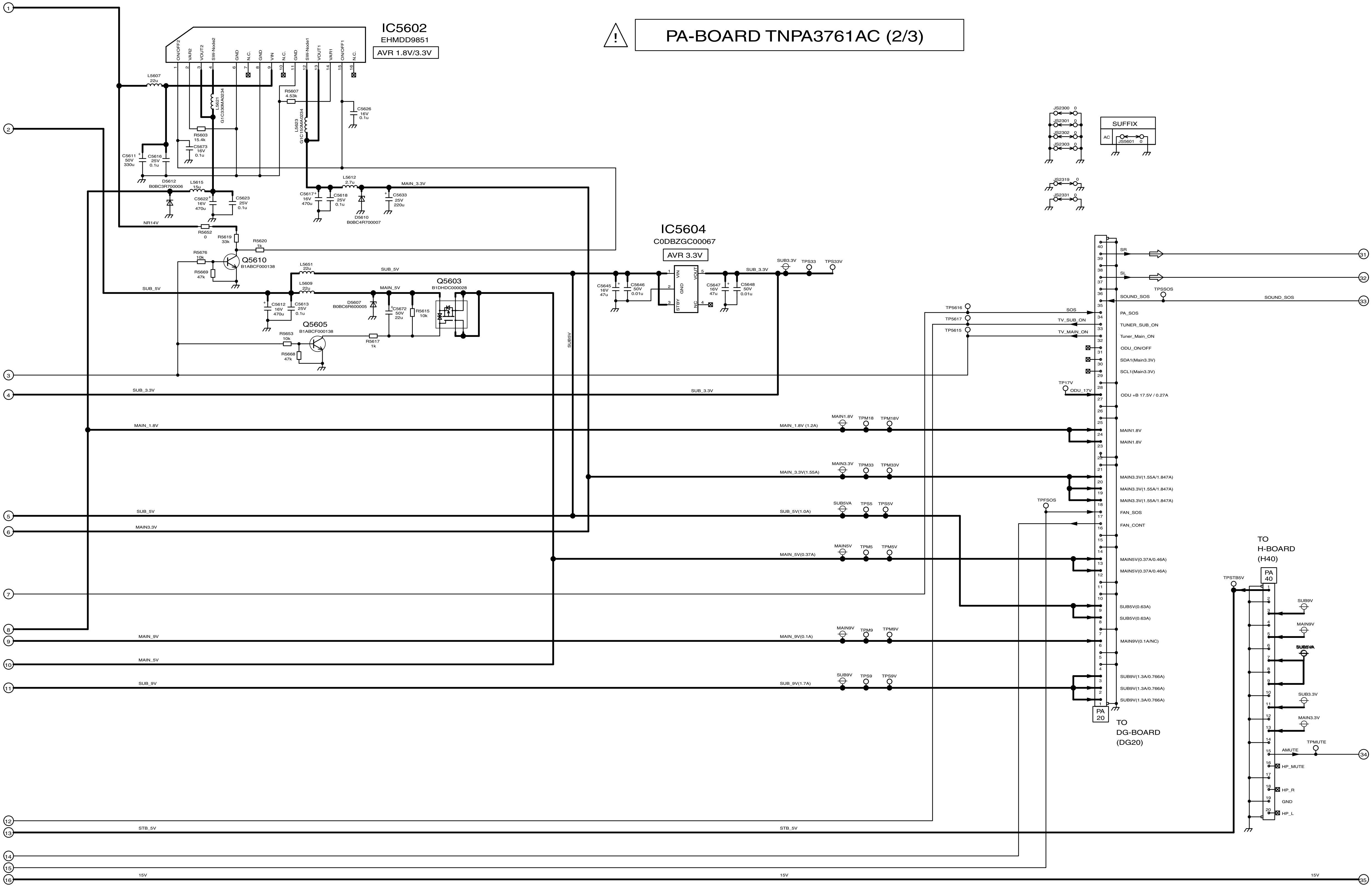
PA-BOARD TNPA3761AC (1/3)



A
B
C
D
E
TO P-BOARD (P10)
PA 10
TP16
F_STBY_14V
F_STBY_14V
F_STBY_14V
GND
GND
GND
14.0
14.0
14.0
0
0
0
NR14V
IC5601
N0BG2DE00001
AVR 5V/9V
N.C.
ON/OFF2
VAR2
VOUT2
SW-Node2
GND
N.C.
GND
VIN
N.C.
GND
SW-Node1
VOUT1
VAR1
ON/OFF1
L5604 2.7u
L5624 G1C330MA0234
R5601 180
R5660 0
R5609 200
C5605 25V 470u
C5619 25V 0.1u
L5622 G1C150MA0234
SUB_5V
Q5613 B1ABCF000138
R5693 33k
R5695 10k
R5692 1k
R5667 47k
C5637 16V 0.1u
L5602 2.7u
SUB_9V
Q5601 B1DHDC000028
MAIN_9V
C5606 16V 470u
C5670 25V 0.1u
L5606 22u
C5609 50V 22u
D5606 B0BC01100001
R5605 4.7k
R5606 2.2k
Q5602 B1ABCF000138
R5665 47k
R5672 10k
SUB_3.3V
IC5801
C0DBAZF00003
AVR 15V FAN CONTROL
R5836 1k
Vin
Vout(sw)
GND
Vadj
ON/OFF
15V
L5801 G0C101K00023
C5801 25V 470u
C5809 25V 1u
C5810 25V 47u
R5802 13k
R5803 2k
R5801 845
MAIN_5V
D5801 B0JCME000037
L5802 100u
C5802 25V 470u
C5804 16V 0.1u
R5804 4.4V
C5805 16V 1u
R5805 2.2k
R5806 2.2k
R5807 2.2k
R5808 2.2k
TO FAN
PA 31
PA 32
PA 33
PA 34
FAN
SOS
D5804 MAZ31200ML
R5822 100
R5823 100
R5824 100
R5826 100
D5805 MA3X152E0L
D5806 MA3X152E0L
D5807 MA2J11100L
FAN_SOS
R5809 4.7k
Q5643 2SA207700L
Q5641 2SA207700L
R5643 1k
R5641 2.2k
R5644 2.2k
C5642 16V 0.1u
R5639 2.2k
R5640 4.7k
R5625 4.7k
C5641 16V 0.1u
R5654 10k
R5694 47k
Q5604 B1ABCF000138
Q5642 2SA207700L
R5647 220
R5648 3.9k
C5644 16V 0.1u
D5646 MA3X152E0L
PA_SOS
R5649 100k
R5645 2.2k
R5646 4.7k
D5649 MA2J11100L
C5643 16V 0.1u
R5659 470
R5642 470
R5650 220
D5647 MA3X152D0L
MAIN_1.8V
MAIN_9V
MAIN_5V
MAIN3.3V
MAIN1.8V
R5632 470
R5633 1k
R5634 470
R5635 220
NR14V
SUB_3.3V
SUB_9V-1
SUB_5V
D5641 MA3X152D0L
D5643 MA3X152D0L
Q5644 B1ABCF000138
R5637 10k
R5638 10k
STB_5V
D5635 MAZ30470HL
D5642 MAZ30470ML
D5644 MAZ30560ML
D5639 MAZ30470HL
D5640 MAZ30200HL
R5621 4.7k
R5662 4.7k
R5664 4.7k
R5626 4.7k
R5627 4.7k
D5637 MA3X152E0L
D5638 MA3X152E0L
D5634 MA2J11100L
NR14V ①
SUB_5V ②
③
SUB_3.3V ④
SUB_9V
SUB_5V ⑤
MAIN3.3V ⑥
PA_SOS ⑦
MAIN_1.8V ⑧
MAIN_9V ⑨
MAIN_5V ⑩
SUB_9V ⑪
⑫
STB_5V ⑬
⑭
⑮
15V ⑯
1
2
3
4
5
6
7
8

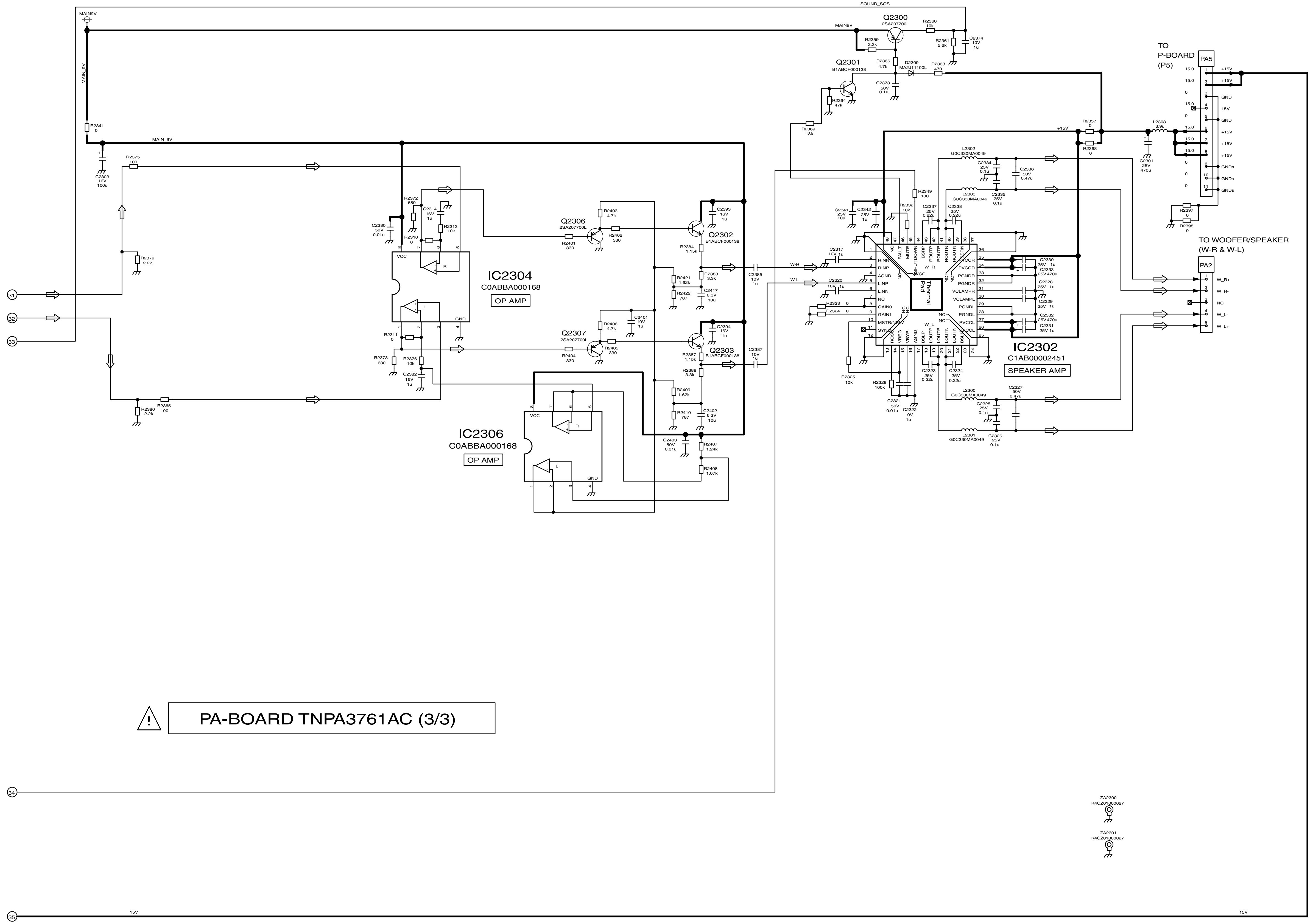
TH-50PV60A
PA-Board (1 of 3) Schematic Diagram

TH-50PV60A
PA-Board (1 of 3) Schematic Diagram


PA-BOARD TNPA3761AC (2/3)
IC5602
EHMDD9851
AVR 1.8V/3.3V
ON/OFF2
VAR2
VOUT2
SW-Node2
GND
N.C.
VIN
SW-Node1
VOUT1
VAR1
ON/OFF1
L5607 22u
L5621 G1C330MA0234
L5623 G1C150MA0234
R5607 4.53k
R5603 15.4k
C5626 16V 0.1u
C5611 50V 330u
C5616 25V 0.1u
C5673 16V 0.1u
D5612 B0BC3R700006
L5615 15u
C5622 16V 470u
C5623 25V 0.1u
C5617 16V 470u
C5618 25V 0.1u
L5612 2.7u
D5610 B0BC4R700007
C5633 25V 220u
MAIN_3.3V
NR14V
R5652 0
R5619 33k
R5620 1k
R5676 10k
R5669 47k
Q5610 B1ABCF000138
L5651 22u
L5609 22u
SUB_5V
MAIN_5V
Q5603 B1DHDC000028
D5607 B0BC6R600005
C5612 16V 470u
C5613 25V 0.1u
C5672 50V 22u
R5615 10k
Q5605 B1ABCF000138
R5653 10k
R5668 47k
R5617 1k
IC5604
C0DBZGC00067
AVR 3.3V
VIN
GND
STBY
VOUT
NC
C5645 16V 47u
C5646 50V 0.01u
C5647 16V 47u
C5648 50V 0.01u
SUB_3.3V
SUB3.3V
TPS33
TPS33V
JS2300 0
JS2301 0
JS2302 0
JS2303 0
JS2319 0
JS2331 0
SUFFIX
AC
JS5601 0
SR
SL
SOUND_SOS
TPSSOS
PA_SOS
TUNER_SUB_ON
Tuner_Main_ON
ODU_ON/OFF
SDA1(Main3.3V)
SCL1(Main3.3V)
ODU +B 17.5V / 0.27A
TP5616
TP5617
TP5615
SOS
TV_SUB_ON
TV_MAIN_ON
TP17V
ODU_17V
MAIN_1.8V
MAIN_1.8V (1.2A)
MAIN1.8V
TPM18
TPM18V
MAIN_3.3V(1.55A)
MAIN3.3V
TPM33
TPM33V
MAIN3.3V(1.55A/1.847A)
TPFSOS
FAN_SOS
FAN_CONT
SUB_5V(1.0A)
SUB5VA
TPS5
TPS5V
MAIN_5V(0.37A)
MAIN5V
TPM5
TPM5V
MAIN5V(0.37A/0.46A)
SUB5V(0.63A)
MAIN_9V
MAIN_9V(0.1A)
MAIN9V
TPM9
TPM9V
MAIN9V(0.1A/NC)
SUB_9V
SUB_9V(1.7A)
SUB9V
TPS9
TPS9V
SUB9V(1.3A/0.766A)
PA 20
TO DG-BOARD (DG20)
TO H-BOARD (H40)
PA 40
TPSTB5V
SUB9V
MAIN9V
SUB5VA
SUB3.3V
MAIN3.3V
TPMUTE
AMUTE
HP_MUTE
HP_R
GND
HP_L
MAIN3.3V
MAIN_5V
STB_5V
15V
SUB5V

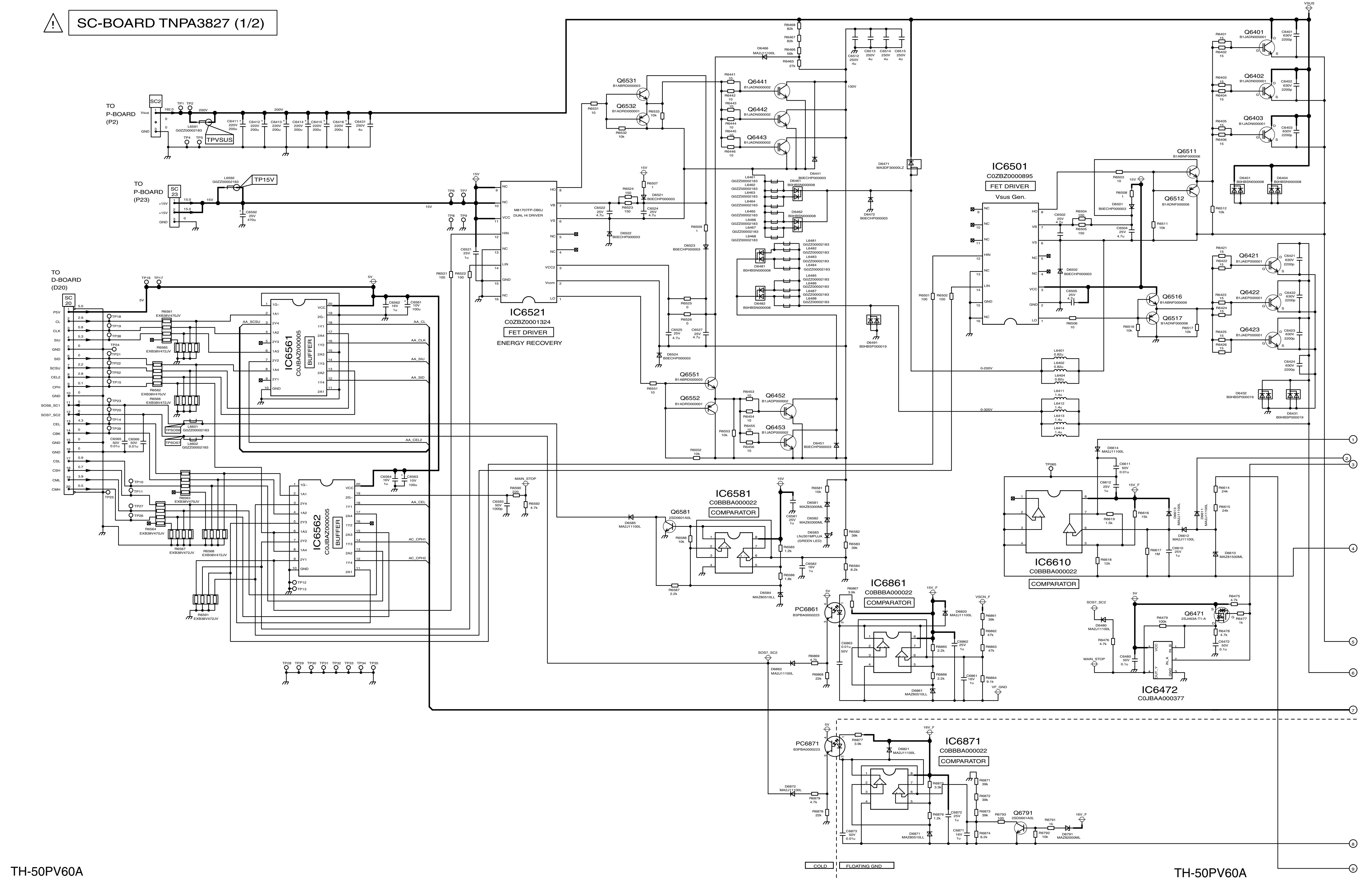
TH-50PV60A
PA-Board (2 of 3) Schematic Diagram

TH-50PV60A
PA-Board (2 of 3) Schematic Diagram


MAIN9V
SOUND_SOS
Q2300
2SA207700L
Q2301
B1ABCF000138
R2359 2.2k
R2360 10k
R2361 5.6k
C2374 10V 1u
R2366 4.7k
D2309 MA2J11100L
R2363 470
C2373 50V 0.1u
R2364 47k
R2369 18k
R2341 0
MAIN_9V
C2303 16V 100u
R2375 100
R2379 2.2k
R2372 680
C2314 16V 1u
R2312 10k
C2380 50V 0.01u
R2310 0
VCC
GND
IC2304
C0ABBA000168
OP AMP
R2311 0
R2373 680
R2376 10k
C2382 16V 1u
R2380 2.2k
R2365 100
Q2306
2SA207700L
R2401 330
R2403 4.7k
R2402 330
Q2302
B1ABCF000138
C2393 16V 1u
R2384 1.15k
R2421 1.62k
R2422 787
R2383 3.3k
C2417 6.3V 10u
C2385 10V 1u
Q2307
2SA207700L
R2404 330
R2406 4.7k
R2405 330
C2401 10V 1u
Q2303
B1ABCF000138
C2394 16V 1u
R2387 1.15k
R2388 3.3k
R2409 1.62k
R2410 787
C2402 6.3V 10u
C2387 10V 1u
C2403 50V 0.01u
R2407 1.24k
R2408 1.07k
IC2306
C0ABBA000168
OP AMP
W-R
W-L
C2317 10V 1u
C2320 10V 1u
R2323 0
R2324 0
R2325 10k
R2329 100k
C2321 50V 0.01u
C2322 10V 1u
C2341 25V 10u
C2342 25V 1u
R2332 10k
R2349 100
C2337 25V 0.22u
C2338 25V 0.22u
L2302 G0C330MA0049
C2334 25V 0.1u
C2336 50V 0.47u
L2303 G0C330MA0049
C2335 25V 0.1u
RINN
RINP
AGND
LINP
LINN
NC
GAIN0
GAIN1
MSTR/NSLV
SYNC
FAULT
MUTE
SHUTDOWN
BSRP
ROUTP
ROUTN
BSRN
AVCC
W_R
W_L
Thermal Pad
PVCCR
PGNDR
VCLAMPR
VCLAMPL
PGNDL
PVCCL
ROSC
VREG
VBYP
BSLP
LOUTP
LOUTN
BSLN
C2330 25V 1u
C2333 25V 470u
C2328 25V 1u
C2329 25V 1u
C2332 25V 470u
C2331 25V 1u
IC2302
C1AB00002451
SPEAKER AMP
C2323 25V 0.22u
C2324 25V 0.22u
L2300 G0C330MA0049
C2327 50V 0.47u
C2325 25V 0.1u
L2301 G0C330MA0049
C2326 25V 0.1u
+15V
R2357 0
R2368 0
L2308 3.9u
C2301 25V 470u
TO
P-BOARD
(P5)
PA5
GND
15V
+15V
GNDs
R2397 0
R2398 0
TO WOOFER/SPEAKER
(W-R & W-L)
PA2
W_R+
W_R-
NC
W_L-
W_L+
ZA2300
K4CZ01000027
ZA2301
K4CZ01000027
31
32
33
34
35
15V

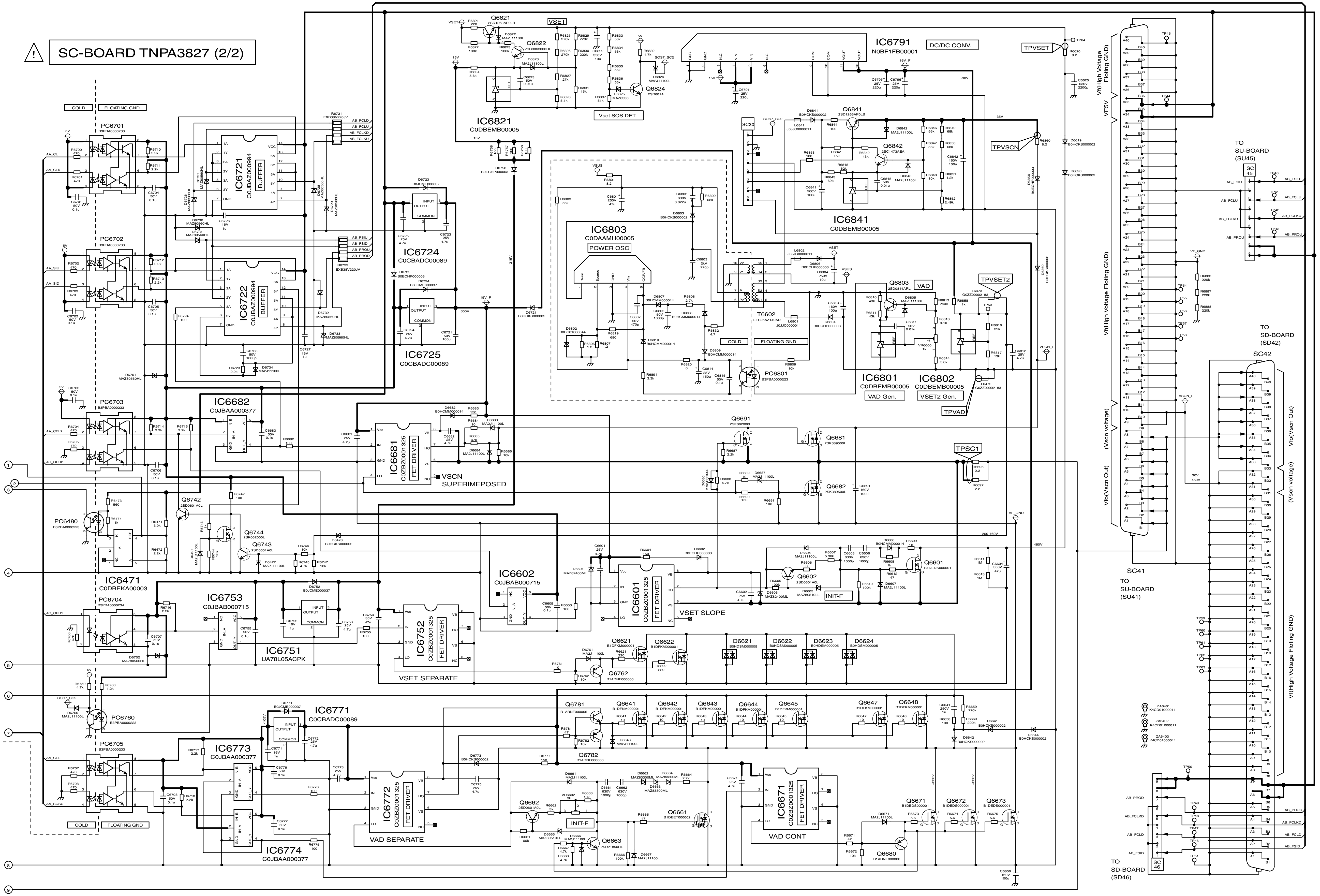
PA-BOARD TNPA3761AC (3/3)

SC-BOARD TNPA3827 (1/2)


TO P-BOARD (P2)
SC2
Vsus
GND
TP1
TP2
TP4
TP5
TPVSUS
L6591 G0ZZ00002183
200V
TO P-BOARD (P23)
SC23
+15V
GND
L6592 G0ZZ00002183
TP15V
15V
TO D-BOARD (D20)
SC20
P5V
CL
CLK
SIU
GND
SID
SCSU
CEL2
CPH
SOS6_SC1
SOS7_SC2
CEL
CBK
CSL
CSH
CML
CMH
IC6561
C0JBAZ000005
BUFFER
IC6562
C0JBAZ000005
BUFFER
AA_SCSU
AA_CL
AA_CLK
AA_SIU
AA_SID
AA_CEL2
AA_CEL
AC_CPH1
AC_CPH2
TPSOS6
TPSOS7
IC6521
C0ZBZ0001324
FET DRIVER
ENERGY RECOVERY
M81707FP-DB0J
DUAL H DRIVER
Q6531
B1ABRD000003
Q6532
B1ADRD000001
Q6441
B1JADN000002
Q6442
B1JADN000002
Q6443
B1JADN000002
Q6551
B1ABRD000003
Q6552
B1ADRD000001
Q6452
B1JADP000002
Q6453
B1JADP000002
D6471
MA3DF30000LZ
D6472
B0ECHP000003
D6491
B0HBSP000019
100V
IC6501
C0ZBZ0000895
FET DRIVER
Vsus Gen.
Q6511
B1ABNF000006
Q6512
B1ADNF000006
Q6516
B1ABNF000006
Q6517
B1ADNF000006
Q6401
B1JADN000001
Q6402
B1JADN000001
Q6403
B1JADN000001
Q6421
B1JAEP000001
Q6422
B1JAEP000001
Q6423
B1JAEP000001
D6401
B0HBSN000008
D6404
B0HBSN000008
D6432
B0HBSP000019
D6431
B0HBSP000019
VSUS
0-200V
0-305V
IC6581
C0BBBA000022
COMPARATOR
Q6581
2SD0601A0L
D6583
LNJ301MPUJA
(GREEN LED)
MAIN_STOP
IC6610
C0BBBA000022
COMPARATOR
TP065
IC6861
C0BBBA000022
COMPARATOR
PC6861
B3PBA0000223
VSCN_F
VF_GND
SOS7_SC2
Q6471
2SJ463A-T1-A
IC6472
C0JBAA000377
MAIN_STOP
IC6871
C0BBBA000022
COMPARATOR
PC6871
B3PBA0000223
Q6791
2SD0601A0L
16V_F
15V_F
COLD
FLOATING GND
TP28
TP29
TP30
TP31
TP32
TP33
TP34
TP35
①
②
③
④
⑤
⑥
⑦
⑧
⑨

TH-50PV60A
SC-Board (1 of 2) Schematic Diagram

TH-50PV60A
SC-Board (1 of 2) Schematic Diagram

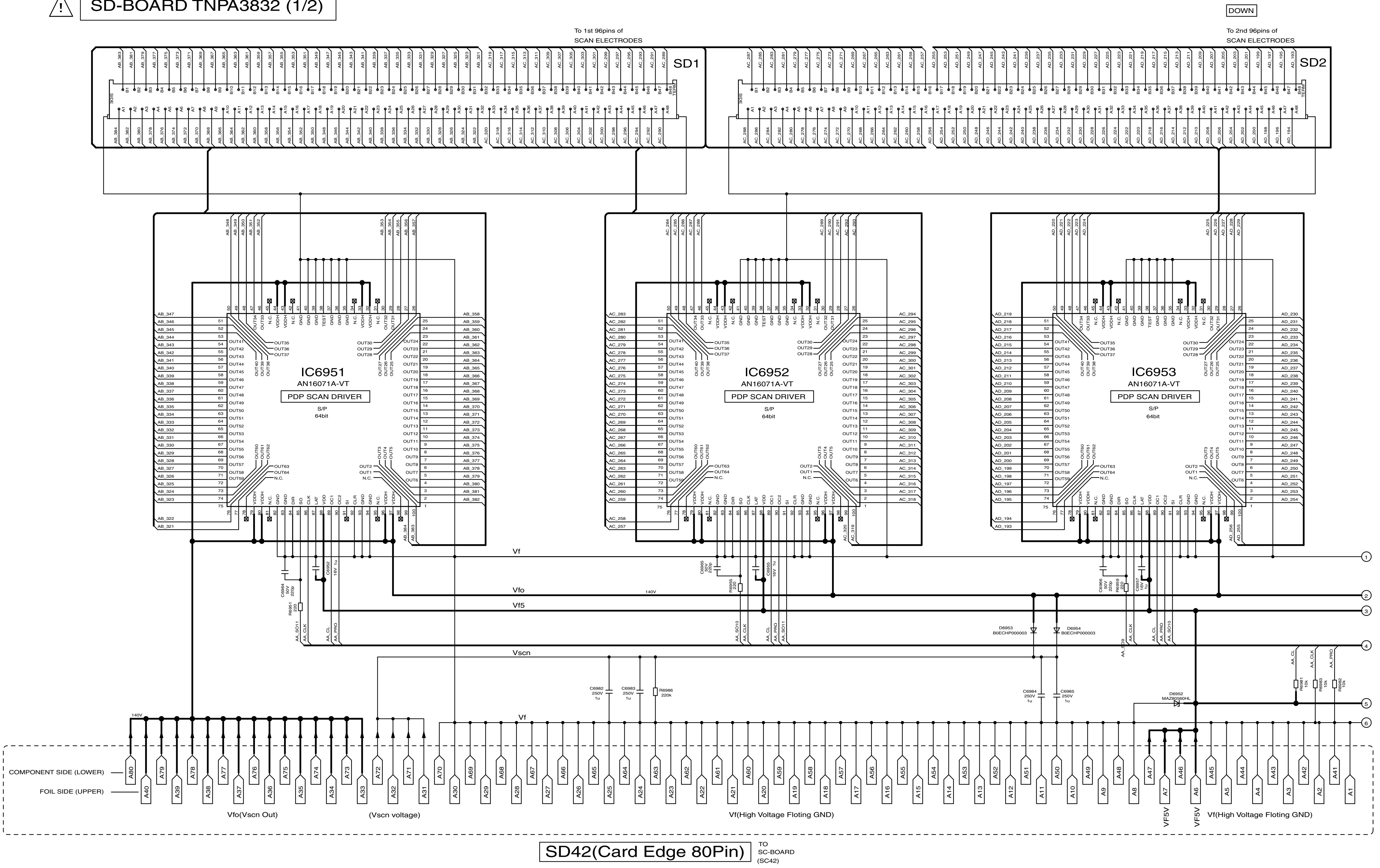

SC-BOARD TNPA3827 (2/2)
COLD
FLOATING GND
PC6701
B3PBA0000233
PC6702
PC6703
PC6704
B3PBA0000234
PC6705
PC6480
PC6760
IC6721
C0JBAZ000994
BUFFER
IC6722
C0JBAZ000994
BUFFER
IC6724
C0CBADC00089
IC6725
C0CBADC00089
IC6682
C0JBAA000377
IC6681
C0ZBZ0001325
FET DRIVER
VSCN SUPERIMPOSED
IC6471
C0DBEKA00003
IC6753
C0JBAB000715
IC6751
UA78L05ACPK
IC6752
C0ZBZ0001325
FET DRIVER
VSET SEPARATE
IC6602
C0JBAB000715
IC6601
C0ZBZ0001325
FET DRIVER
VSET SLOPE
INIT-F
IC6771
C0CBADC00089
IC6773
C0JBAA000377
IC6774
C0JBAA000377
IC6772
C0ZBZ0001325
FET DRIVER
VAD SEPARATE
IC6671
C0ZBZ0001325
FET DRIVER
VAD CONT
IC6821
C0DBEMB00005
VSET
Vset SOS DET
IC6791
N0BF1FB00001
DC/DC CONV.
TPVSET
IC6841
C0DBEMB00005
TPVSCN
IC6803
C0DAAMH00005
POWER OSC
T6602
ETS25AZ149AD
PC6801
B3PBA0000223
IC6801
C0DBEMB00005
VAD Gen.
IC6802
C0DBEMB00005
VSET2 Gen.
TPVSET2
TPVAD
VAD
TPSC1
Q6691
Q6681
Q6682
Q6601
Q6602
Q6621
Q6622
D6621
D6622
D6623
D6624
Q6762
Q6781
Q6782
Q6641
Q6642
Q6643
Q6644
Q6645
Q6647
Q6648
Q6662
Q6661
Q6663
Q6680
Q6671
Q6672
Q6673
Q6742
Q6743
Q6744
Q6821
Q6822
Q6824
Q6841
Q6842
Q6803
SC30
SC45
SC42
SC41
SC46
TO SU-BOARD (SU45)
TO SD-BOARD (SD42)
TO SU-BOARD (SU41)
TO SD-BOARD (SD46)
VF5V
Vf(High Voltage Floting GND)
Vf(High Voltage Floting GND)
(Vscn voltage)
Vfo(Vscn Out)
AB_FSIU
AB_FCLU
AB_FCLKU
AB_PROU
AB_PROD
AB_FCLKD
AB_FCLD
AB_FSID
AA_CL
AA_CLK
AA_SIU
AA_SID
AA_CEL2
AC_CPH2
AC_CPH1
AA_CEL
AA_SCSU
ZA6401
ZA6402
ZA6403
1
2
3
4
5
6
7
8
9

TH-50PV60A SC-Board (2 of 2) Schematic Diagram

TH-50PV60A SC-Board (2 of 2) Schematic Diagram

10 11 12 13 14 15 16 17 18

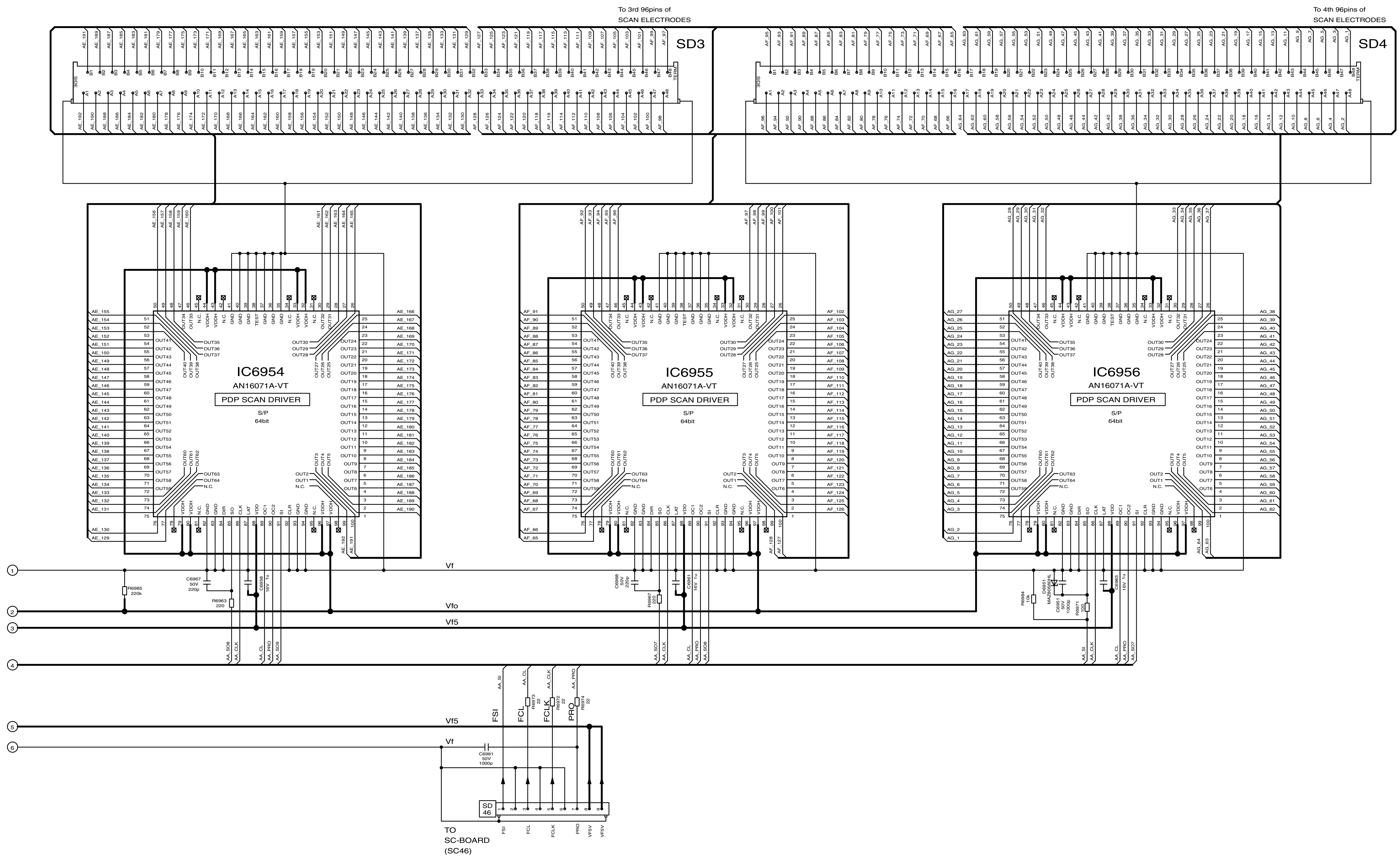
SD-BOARD TNPA3832 (1/2)

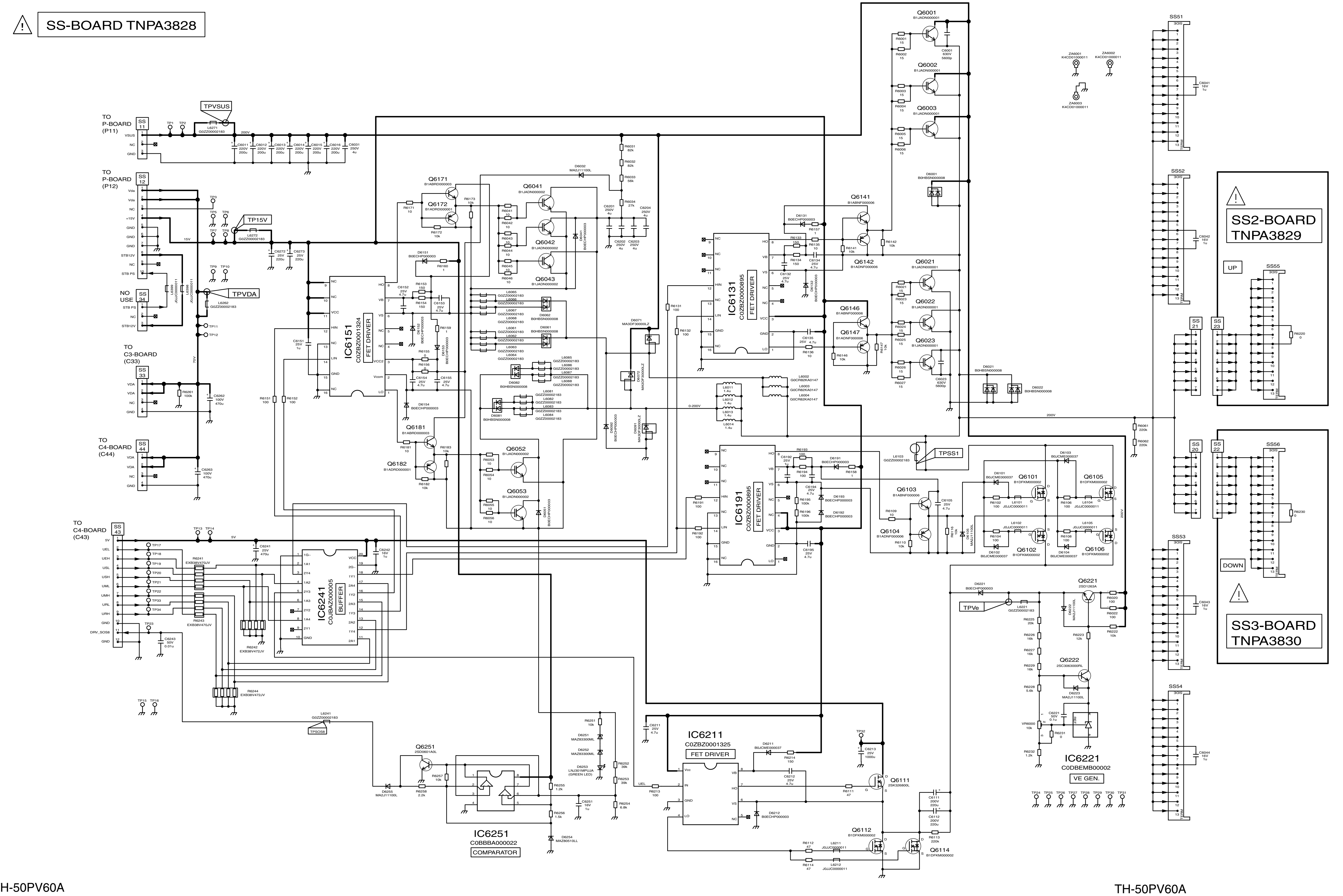

DOWN
To 1st 96pins of SCAN ELECTRODES
To 2nd 96pins of SCAN ELECTRODES
SD1
SD2
IC6951
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
IC6952
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
IC6953
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
Vf
Vfo
Vf5
Vscn
140V
C6964 50V 220p
R6951 220
C6952 16V 1u
C6965 50V 220p
R6955 220
C6955 16V 1u
C6966 50V 220p
R6959 220
C6957 16V 1u
D6953 B0ECHP000003
D6954 B0ECHP000003
C6982 250V 1u
C6983 250V 1u
R6986 220k
C6984 250V 1u
C6985 250V 1u
D6952 MAZ80560HL
R6981 10k
R6983 10k
R6982 10k
AA_CL
AA_CLK
AA_PRO
AA_SO11
AA_SO10
AA_SO9
COMPONENT SIDE (LOWER)
FOIL SIDE (UPPER)
Vfo(Vscn Out)
(Vscn voltage)
Vf(High Voltage Floting GND)
VF5V
VF5V
Vf(High Voltage Floting GND)
SD42(Card Edge 80Pin)
TO SC-BOARD (SC42)
A
B
C
D
E
1
2
3
4
5
6
7
8

TH-50PV60A
SD-Board (1 of 2) Schematic Diagram

TH-50PV60A
SD-Board (1 of 2) Schematic Diagram

⚠ SD-BOARD TNPA3832 (2/2)

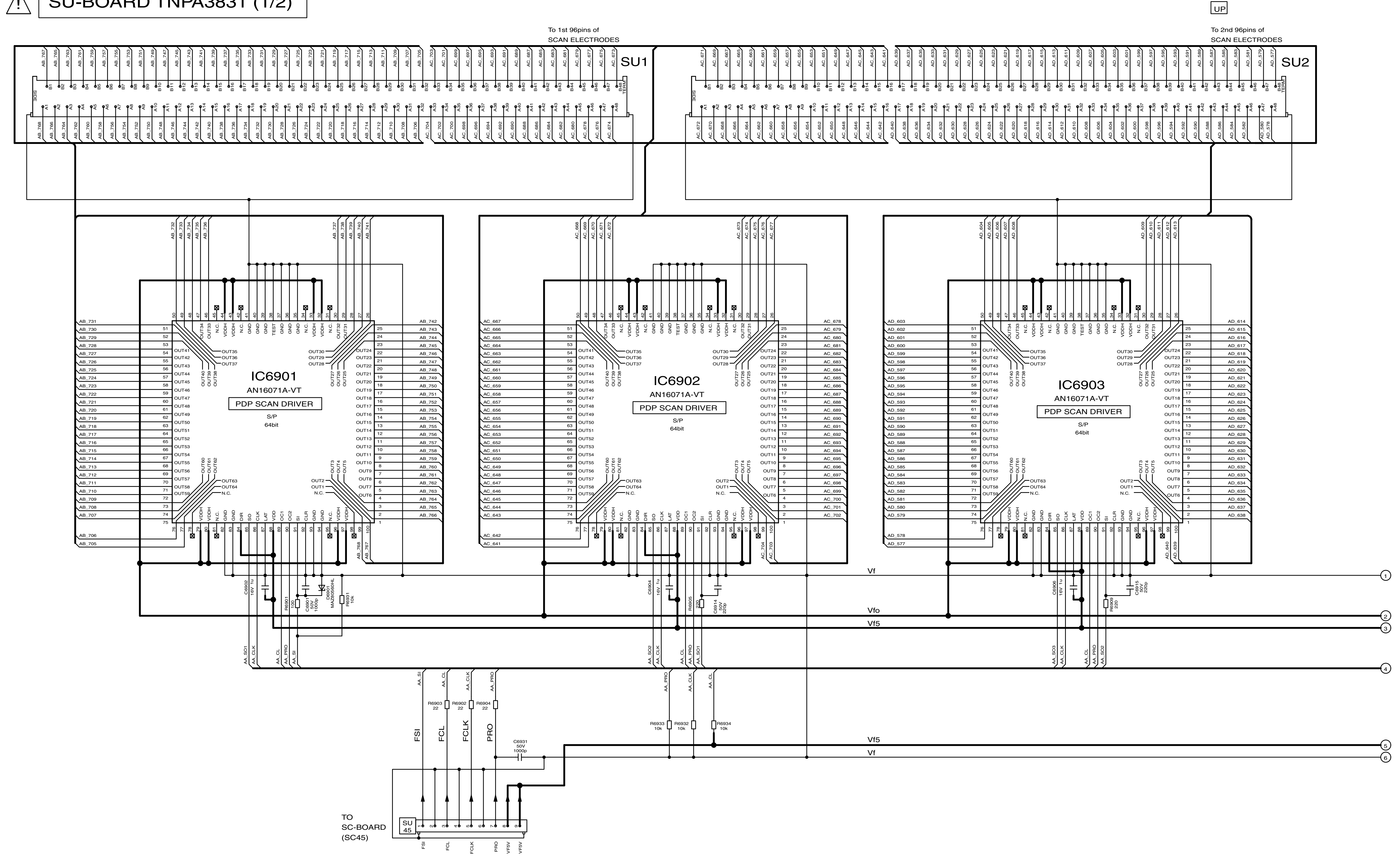

DOWN
To 3rd 96pins of SCAN ELECTRODES
To 4th 96pins of SCAN ELECTRODES
SD3
SD4
IC6954
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
IC6955
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
IC6956
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
Vf
Vfo
Vf5
Vf5
Vf
R6985 220k
C6967 50V 220p
R6963 220
C6958 16V 1u
C6968 50V 220p
R6967 220
C6961 16V 1u
R6984 10k
D6951 MA2S0580HL
C6951 50V 1000p
R6971 100
C6963 16V 1u
AA_SO8
AA_CLK
AA_CL
AA_PRO
AA_SO9
AA_SO7
AA_SO6
AA_SI
AA_CL
AA_CLK
AA_PRO
FSI
FCL
FCLK
PRO
R6973 22
R6972 22
R6974 22
C6981 50V 1000p
SD46
FSI
FCL
FCLK
PRO
VFSV
VFSV
TO SC-BOARD (SC46)
①
②
③
④
⑤
⑥


A
B
C
D
E
F
SS-BOARD TNPA3828
SS2-BOARD
TNPA3829
SS3-BOARD
TNPA3830
UP
DOWN
TO P-BOARD (P11)
SS 11
VSUS
NC
GND
TPVSUS
L6271 G0ZZ00002183
200V
C6011 220V 200u
C6012 220V 200u
C6013 220V 200u
C6014 220V 200u
C6015 220V 200u
C6016 220V 200u
C6031 250V 4u
TO P-BOARD (P12)
SS 12
Vda
NC
+15V
GND
STB12V
STB PS
TP15V
L6272 G0ZZ00002183
15V
C6272 25V 220u
C6273 25V 220u
NO USE
SS 34
TPVDA
L6262 G0ZZ00002183
TP11
TP12
TO C3-BOARD (C33)
SS 33
VDA
R6261 100k
C6262 100V 470u
70V
TO C4-BOARD (C44)
SS 44
C6263 100V 470u
TO C4-BOARD (C43)
SS 43
5V
UEL
UEH
USL
USH
UML
UMH
URL
URH
DRV_SOS8
TP13
TP14
TP17
TP18
TP19
TP20
TP21
TP22
TP33
TP34
TP23
R6241 EXB38V470JV
R6243 EXB38V470JV
R6242 EXB38V472JV
R6244 EXB38V472JV
C6241 25V 470u
C6242 16V 1u
C6243 50V 0.01u
IC6241
C0JBAZ000005
BUFFER
IC6151
C0ZBZ0001324
FET DRIVER
Q6171 B1ABRD000003
Q6172 B1ADRD000001
Q6041 B1JADN000002
Q6042 B1JADN000002
Q6043 B1JADN000002
Q6181 B1ABRD000003
Q6182 B1ADRD000001
Q6052 B1JADN000002
Q6053 B1JADN000002
D6032 MA2J11100L
R6031 82k
R6032 82k
R6033 56k
R6034 27k
C6201 250V 4u
C6202 250V 4u
C6203 250V 4u
C6204 250V 4u
D6062 B0HBSN000008
D6061 B0HBSN000008
D6082 B0HBSN000008
D6081 B0HBSN000008
D6071 MA3DF30000LZ
D6072 MA3DF30000LZ
D6091 MA3DF30000LZ
0-200V
IC6131
C0ZBZ0000895
FET DRIVER
IC6191
C0ZBZ0000895
FET DRIVER
Q6001 B1JADN000001
Q6002 B1JADN000001
Q6003 B1JADN000001
C6001 630V 5600p
D6001 B0HBSN000008
Q6141 B1ABNF000006
Q6142 B1ADNF000006
Q6146 B1ABNF000006
Q6147 B1ADNF000006
Q6021 B1JADN000001
Q6022 B1JADN000001
Q6023 B1JADN000001
C6023 630V 5600p
D6021 B0HBSN000008
D6022 B0HBSN000008
L6002 G0CR82KA0147
L6003 G0CR82KA0147
L6004 G0CR82KA0147
L6011 1.4u
L6012 1.4u
L6013 1.4u
L6014 1.4u
200V
R6061 220k
R6062 220k
TPSS1
L6103 G0ZZ00002183
Q6101 B1DFKM000002
Q6102 B1DFKM000002
Q6103 B1ABNF000006
Q6104 B1ADNF000006
Q6105 B1DFKM000002
Q6106 B1DFKM000002
Q6221 2SD1263A
Q6222 2SC3063000RL
TPVe
L6221 G0ZZ00002183
VR6000 10k
IC6221
C0DBEMB00002
VE GEN.
IC6211
C0ZBZ0001325
FET DRIVER
Q6111 2SK3268O0L
Q6112 B1DFKM000002
Q6114 B1DFKM000002
C6213 25V 1000u
C6111 200V 220u
C6112 200V 220u
Q6251 2SD0601A0L
IC6251
C0BBBA000022
COMPARATOR
D6251 MAZ83300ML
D6252 MAZ83300ML
D6253 LNJ301MPUJA (GREEN LED)
D6254 MAZ80510LL
D6255 MA2J11100L
L6241 G0ZZ00002183
TPSOS8
UEL
ZA6001 K4CD01000011
ZA6002 K4CD01000011
ZA6003 K4CD01000011
SS51
SS52
SS53
SS54
SS55
SS56
SS 21
SS 23
SS 20
SS 22
R6220 0
R6230 0
C6041 16V 1u
C6042 16V 1u
C6043 16V 1u
C6044 16V 1u
TP15
TP16
TP24
TP25
TP26
TP27
TP28
TP29
TP30
TP31
TP32
1
2
3
4
5
6
7
8
9

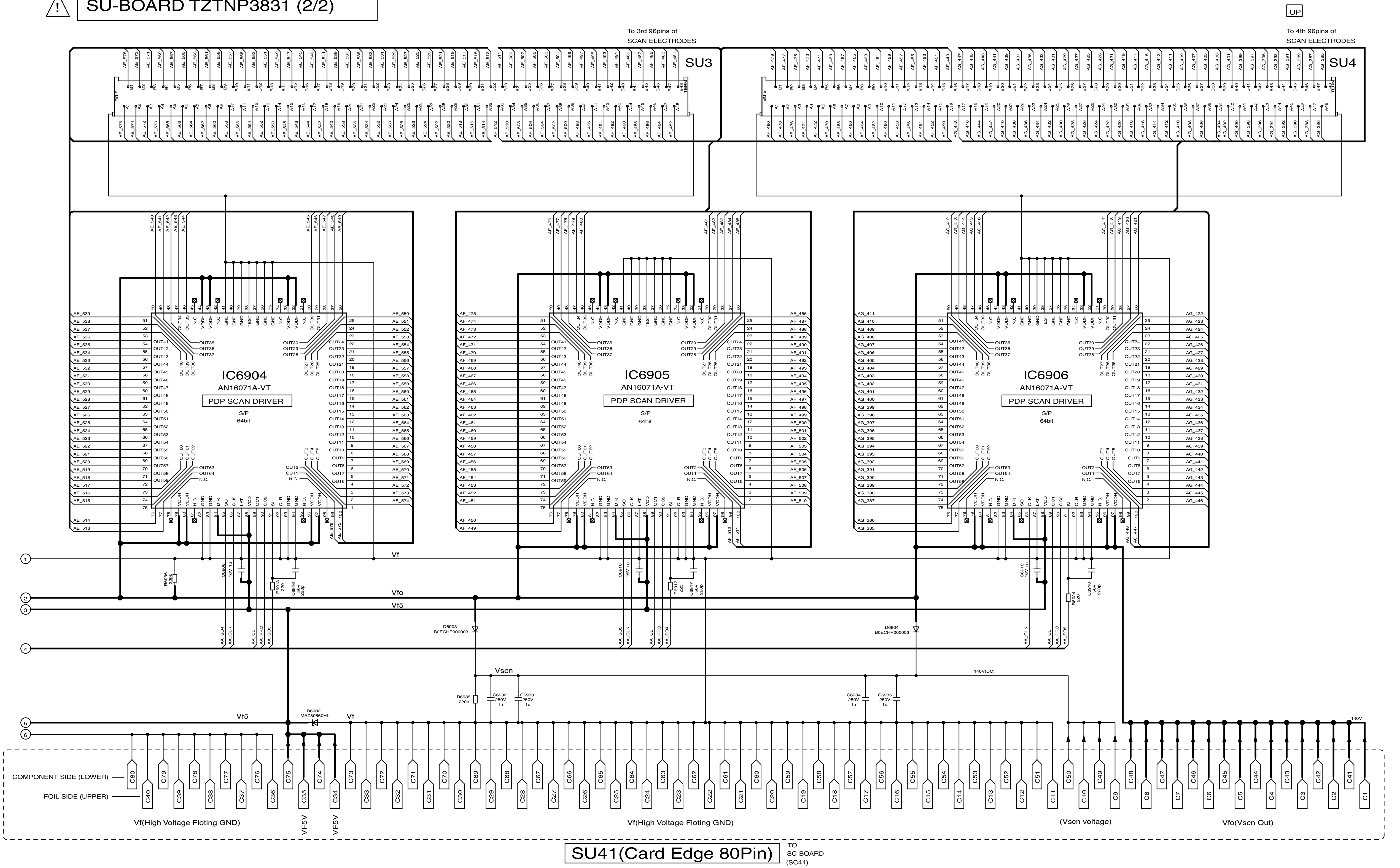
TH-50PV60A
SS, SS2 and SS3-Board Schematic Diagram

TH-50PV60A
SS, SS2 and SS3-Board Schematic Diagram

SU-BOARD TNPA3831 (1/2)


UP
To 1st 96pins of SCAN ELECTRODES
SU1
To 2nd 96pins of SCAN ELECTRODES
SU2
IC6901
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
IC6902
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
IC6903
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
Vf
Vfo
Vf5
Vf5
Vf
C6902 16V 1u
R6901 100
C6901 50V 1000p
D6901 MAZ80560HL
R6931 10k
C6904 16V 1u
R6905 220
C6914 50V 220p
C6906 16V 1u
R6906 220
C6915 50V 220p
AA_SO1
AA_CLK
AA_CL
AA_PRO
AA_SI
AA_SO2
AA_SO3
R6903 22
R6902 22
R6904 22
R6933 10k
R6932 10k
R6934 10k
FSI
FCL
FCLK
PRO
C6931 50V 1000p
TO SC-BOARD (SC45)
SU 45
FSI
FCL
FCLK
PRO
VF5V
VF5V

⚠ SU-BOARD TZTNP3831 (2/2)


UP
To 3rd 96pins of SCAN ELECTRODES
SU3
To 4th 96pins of SCAN ELECTRODES
SU4
IC6904
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
IC6905
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
IC6906
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
Vf
Vfo
Vf5
Vscn
D6903
B0ECHP000003
D6904
B0ECHP000003
D6902
MAZ80560HL
140V(DC)
140V
R6935 220k
C6932 250V 1u
C6933 250V 1u
C6934 250V 1u
C6935 250V 1u
COMPONENT SIDE (LOWER)
FOIL SIDE (UPPER)
Vf(High Voltage Floting GND)
VF5V
VF5V
Vf(High Voltage Floting GND)
(Vscn voltage)
Vfo(Vscn Out)
SU41(Card Edge 80Pin)
TO SC-BOARD (SC41)

14 Block and Schematic Diagram

14.1. Schematic Diagram Note

Important Safety Notice

Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacture's specified parts.

Notes:

1. **Resistor**
   Unit of resistance is OHM [Ω] (K=1,000, M=1,000,000).
2. **Capacitor**
   Unit of capacitance is µF, unless otherwise noted.
3. Coil
   Unit of inductance is H, unless otherwise noted.
4. Test Point
   ⚲ : Test Point position
5. Earth Symbol
   ⏚ : Chassis Earth (Cold) ⏊ : Line Earth (Hot)
6. Voltage Measurement
   Voltage is measured by a DC voltmeter.
   Conditions of the measurement are the following:

Power Source	AC220-240V, 50/60Hz
Receiving Signal	Colour Bar signal (RF)
All customer's controls	Maximum positions

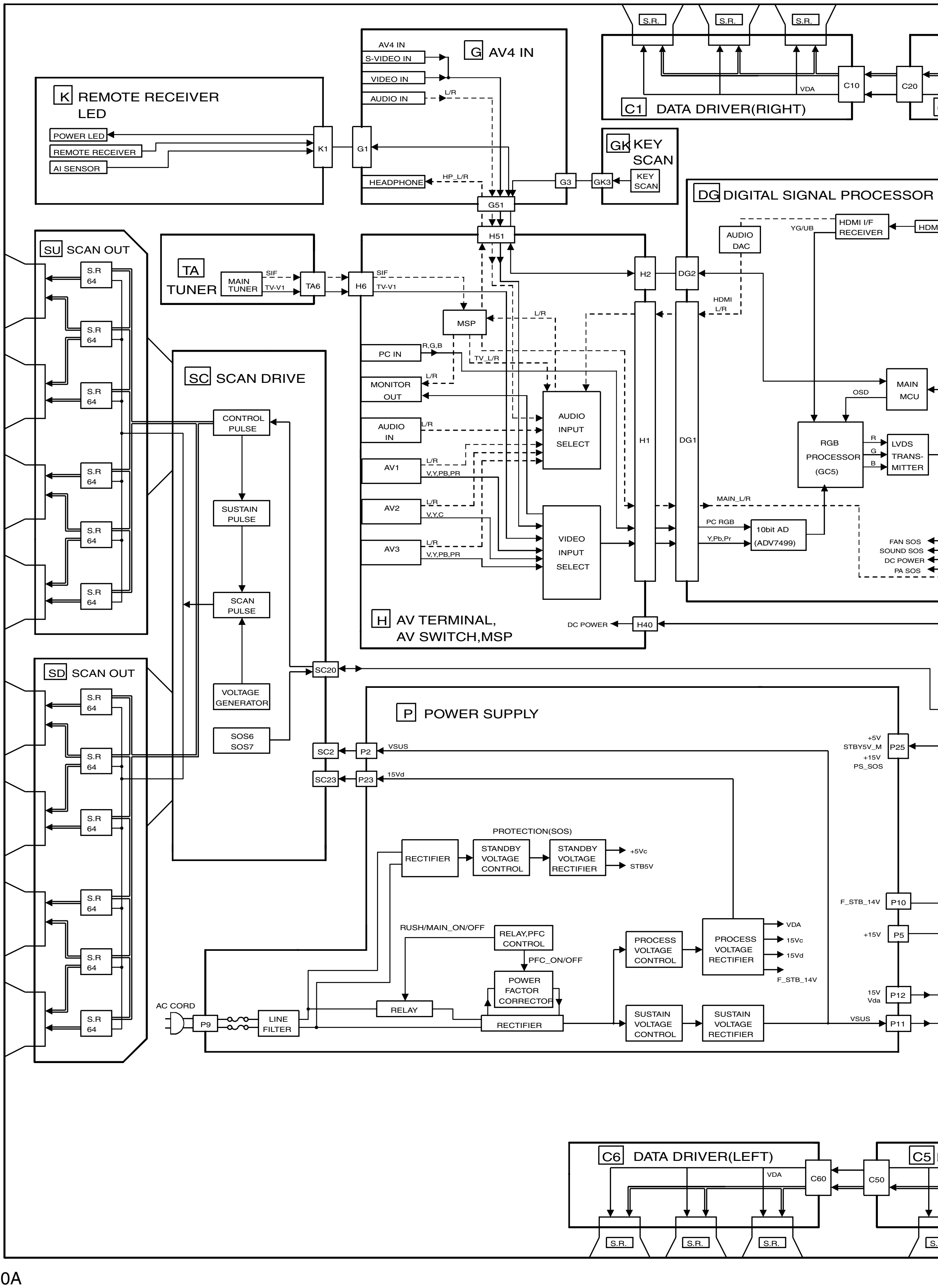
7. When arrow mark (↗) is found, connection is easily found from the direction of arrow.

8. Indicates the major signal flow. : Video ➡ Audio ⇨
9. This schematic diagram is the latest at the time of printing and subject to change without notice.

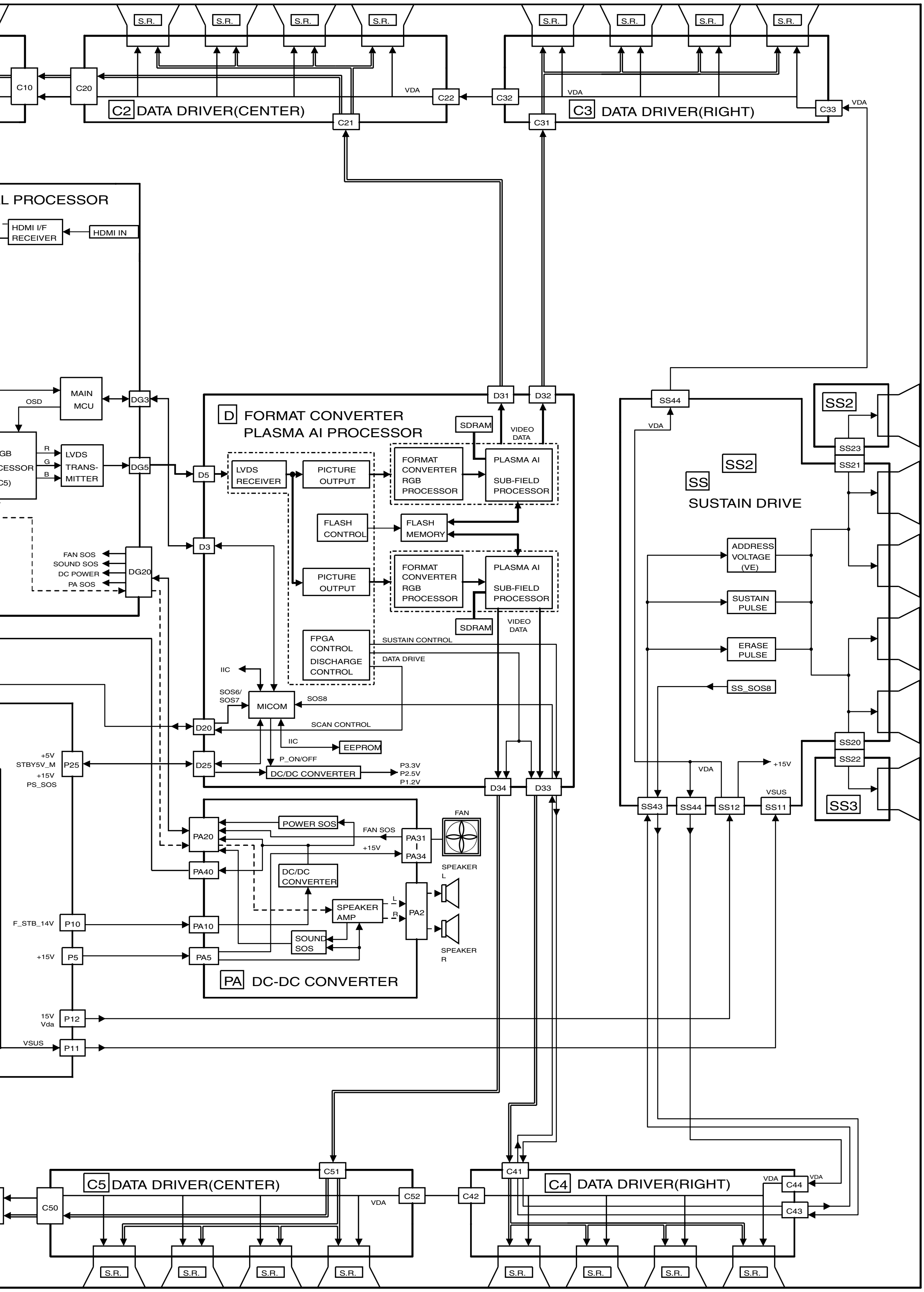
Remarks:

1. The Power Circuit contains a circuit area which uses a separate power supply to isolate the earth connection.
   The circuit is defined by HOT and COLD indications in the schematic diagram. Take the follwing precautions.
   All circuits, except the Power Circuit, are cold.
   Precautions
   a. Do not touch the hot part or the hot and cold parts at the same time or you may be shocked.
   b. Do not short- circuit the hot and cold circuits or a fuse may blow and parts may break.
   c. Do not connect an instrument, such as an oscilloscope, to the hot and cold circuits simultaneously or a fuse may blow.
   Connect the earth of instruments to the earth connection of the circuit being measured.
   d. Make sure to disconnect the power plug before removing the chassis.

14.2. Main Block Diagram

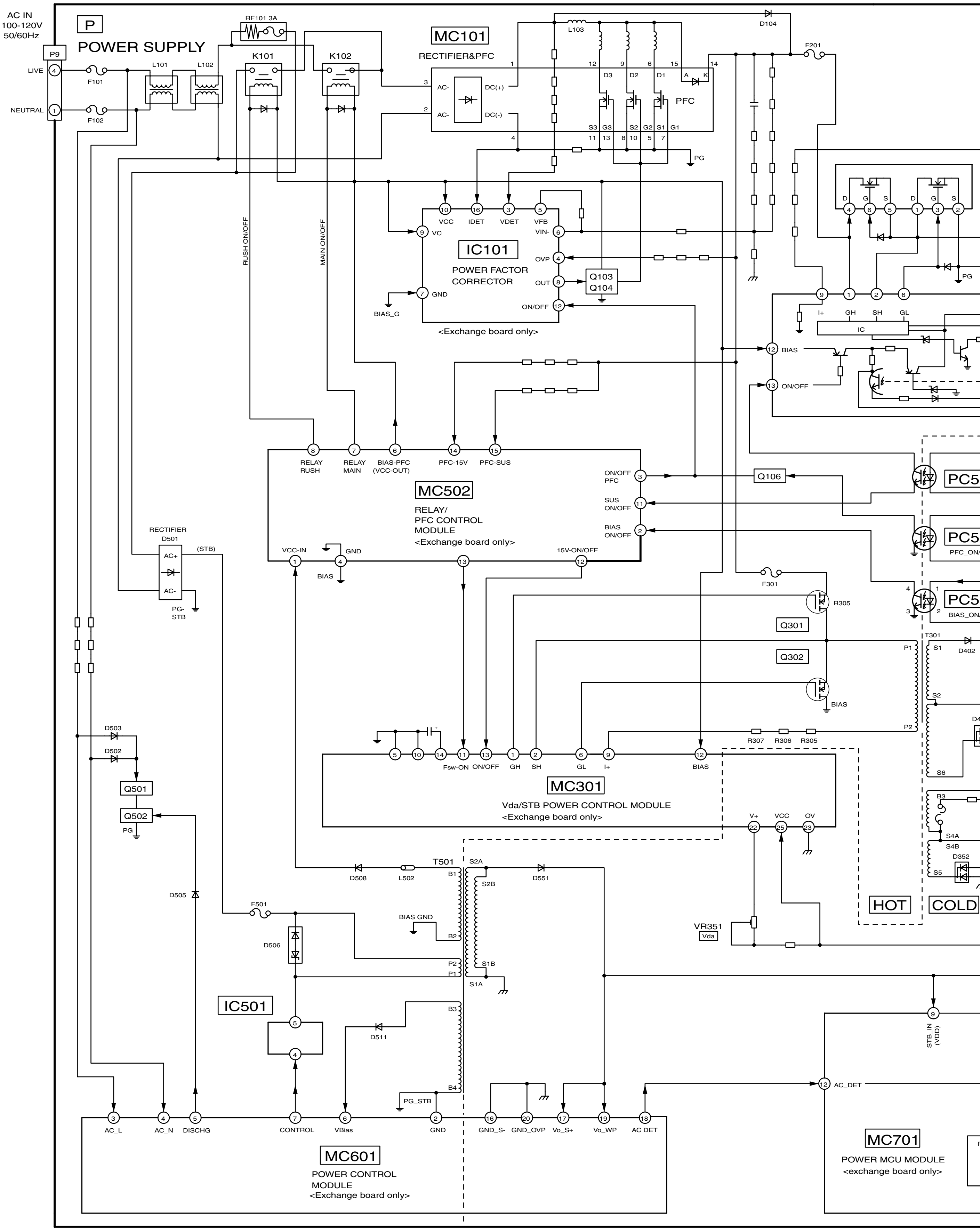

S.R.
S.R.
S.R.
C1 DATA DRIVER(RIGHT)
VDA
C10
C20
G AV4 IN
AV4 IN
S-VIDEO IN
VIDEO IN
AUDIO IN
L/R
HEADPHONE
HP_L/R
G1
G3
G51
K REMOTE RECEIVER LED
POWER LED
REMOTE RECEIVER
AI SENSOR
K1
GK KEY SCAN
KEY SCAN
GK3
DG DIGITAL SIGNAL PROCESSOR
AUDIO DAC
YG/UB
HDMI I/F RECEIVER
HDM
HDMI L/R
DG2
DG1
MAIN MCU
OSD
RGB PROCESSOR (GC5)
R
G
B
LVDS TRANS-MITTER
MAIN_L/R
PC RGB
Y,Pb,Pr
10bit AD (ADV7499)
FAN SOS
SOUND SOS
DC POWER
PA SOS
SU SCAN OUT
S.R 64
SD SCAN OUT
TA TUNER
MAIN TUNER
SIF
TV-V1
TA6
H6
H51
H2
H1
MSP
L/R
PC IN
R,G,B
TV_L/R
MONITOR OUT
AUDIO IN
AV1
V,Y,PB,PR
AV2
V,Y,C
AV3
AUDIO INPUT SELECT
VIDEO INPUT SELECT
H AV TERMINAL, AV SWITCH,MSP
DC POWER
H40
SC SCAN DRIVE
CONTROL PULSE
SUSTAIN PULSE
SCAN PULSE
VOLTAGE GENERATOR
SOS6 SOS7
SC20
SC2
SC23
P POWER SUPPLY
P2
VSUS
P23
15Vd
+5V
STBY5V_M
+15V
PS_SOS
P25
PROTECTION(SOS)
RECTIFIER
STANDBY VOLTAGE CONTROL
STANDBY VOLTAGE RECTIFIER
+5Vc
STB5V
F_STB_14V
P10
RUSH/MAIN_ON/OFF
RELAY,PFC CONTROL
PFC_ON/OFF
POWER FACTOR CORRECTOR
RELAY
RECTIFIER
PROCESS VOLTAGE CONTROL
PROCESS VOLTAGE RECTIFIER
VDA
15Vc
15Vd
F_STB_14V
+15V
P5
15V
Vda
P12
SUSTAIN VOLTAGE CONTROL
SUSTAIN VOLTAGE RECTIFIER
VSUS
P11
AC CORD
P9
LINE FILTER
C6 DATA DRIVER(LEFT)
VDA
C60
C50
C5
S.R.
S.R.
S.R.
S.

TH-50PV60A
Main Block Diagram

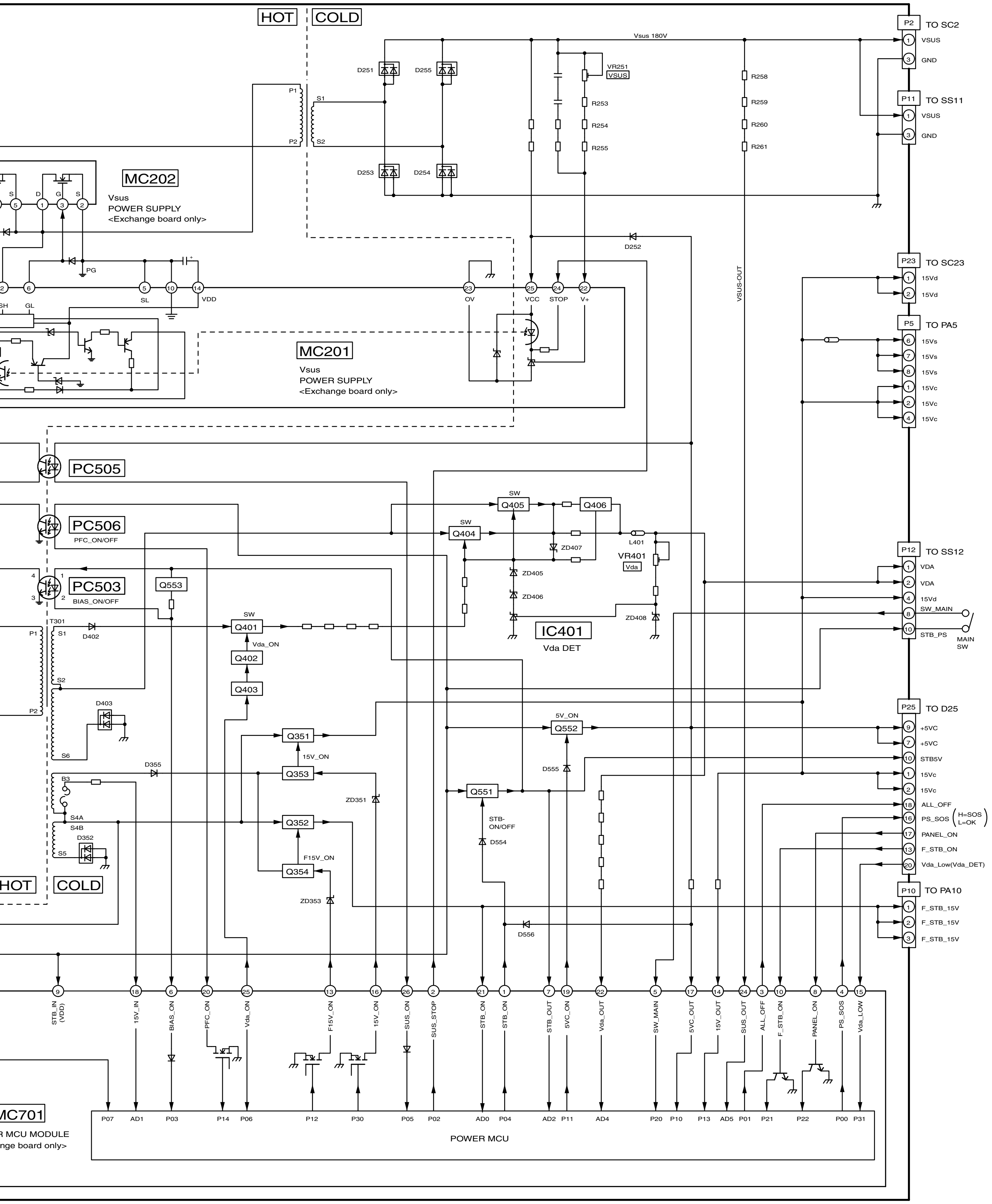

S.R.
C10
C20
C22
C32
VDA
C2 DATA DRIVER(CENTER)
C21
C31
C3 DATA DRIVER(RIGHT)
C33
L PROCESSOR
HDMI I/F RECEIVER
HDMI IN
MAIN MCU
OSD
DG3
GB
CESSOR
C5)
R
G
B
LVDS TRANS-MITTER
DG5
FAN SOS
SOUND SOS
DC POWER
PA SOS
DG20
D31
D32
D FORMAT CONVERTER PLASMA AI PROCESSOR
SDRAM
VIDEO DATA
D5
LVDS RECEIVER
PICTURE OUTPUT
FORMAT CONVERTER RGB PROCESSOR
PLASMA AI SUB-FIELD PROCESSOR
FLASH CONTROL
FLASH MEMORY
D3
FPGA CONTROL
DISCHARGE CONTROL
SUSTAIN CONTROL
DATA DRIVE
IIC
SOS6/ SOS7
MICOM
SOS8
SCAN CONTROL
D20
EEPROM
P_ON/OFF
+5V
STBY5V_M
+15V
PS_SOS
P25
D25
DC/DC CONVERTER
P3.3V
P2.5V
P1.2V
D34
D33
SS44
SS2
SS23
SS21
SS SUSTAIN DRIVE
ADDRESS VOLTAGE (VE)
SUSTAIN PULSE
ERASE PULSE
SS_SOS8
SS20
SS22
SS3
+15V
VSUS
SS43
SS12
SS11
FAN
POWER SOS
FAN SOS
PA20
PA31
PA34
PA40
SPEAKER L
DC/DC CONVERTER
SPEAKER AMP
PA2
F_STB_14V
P10
PA10
SOUND SOS
SPEAKER R
P5
PA5
PA DC-DC CONVERTER
15V Vda
P12
VSUS
P11
C51
C5 DATA DRIVER(CENTER)
C50
C52
C42
C41
C4 DATA DRIVER(RIGHT)
C44
C43

TH-50PV60A
Main Block Diagram

14.3. P-Board Block Diagram

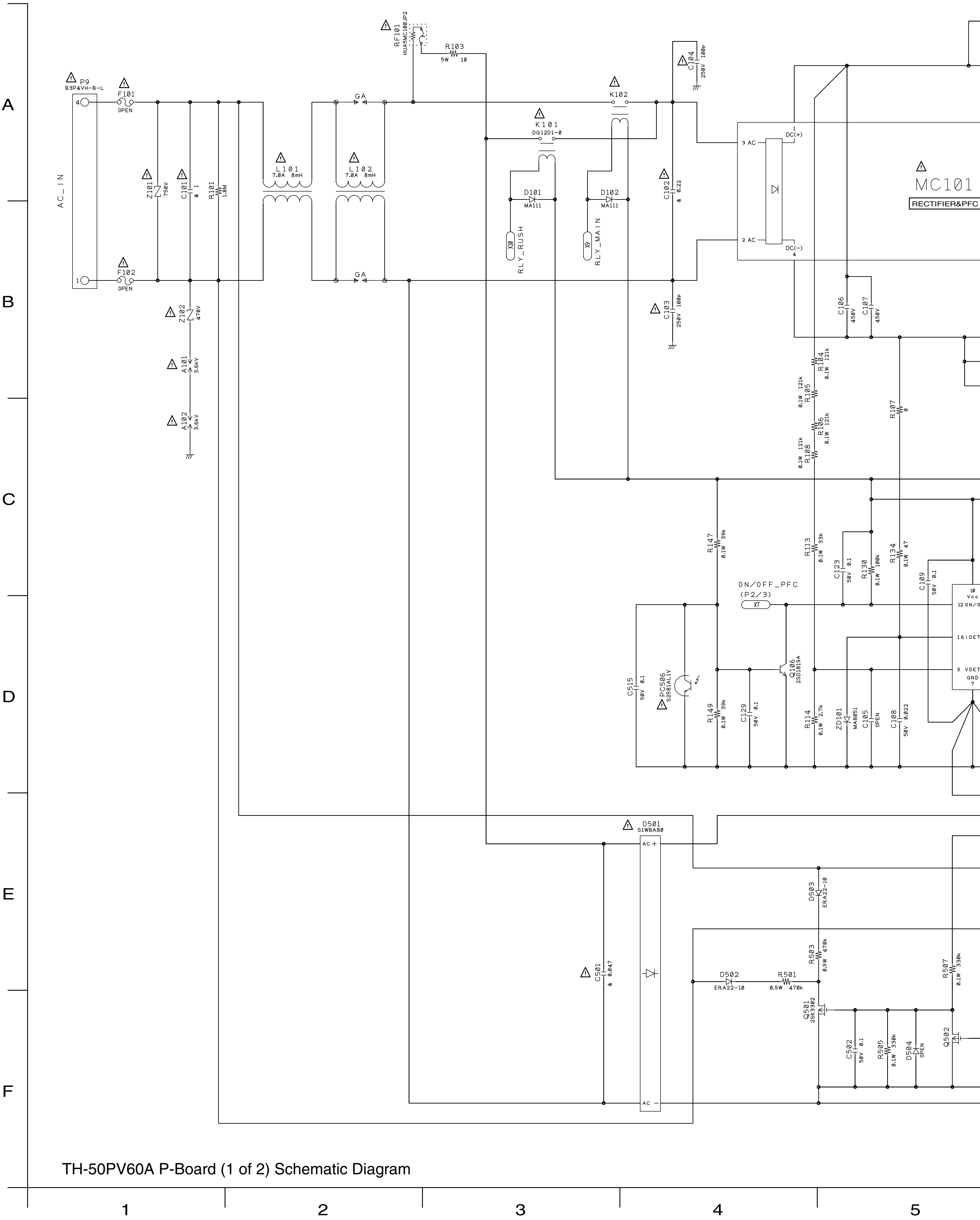

AC IN
100-120V
50/60Hz
P9
LIVE
NEUTRAL
P
POWER SUPPLY
F101
F102
L101
L102
RF101 3A
K101
K102
MC101
RECTIFIER&PFC
AC-
DC(+)
DC(-)
L103
D104
F201
D3
D2
D1
A
K
PFC
S3
G3
S2
G2
S1
G1
PG
RUSH ON/OFF
MAIN ON/OFF
VCC
IDET
VDET
VFB
VC
VIN-
IC101
POWER FACTOR
CORRECTOR
OVP
OUT
GND
ON/OFF
Q103
Q104
BIAS_G
<Exchange board only>
D
G
S
I+
GH
SH
GL
IC
BIAS
ON/OFF
RELAY
RUSH
RELAY
MAIN
BIAS-PFC
(VCC-OUT)
PFC-15V
PFC-SUS
MC502
RELAY/
PFC CONTROL
MODULE
<Exchange board only>
ON/OFF
PFC
SUS
ON/OFF
BIAS
ON/OFF
Q106
PC5
PC5
PFC_ON
PC5
BIAS_ON
RECTIFIER
D501
AC+
AC-
(STB)
PG-
STB
VCC-IN
GND
BIAS
15V-ON/OFF
F301
R305
Q301
Q302
BIAS
T301
P1
S1
D402
S2
P2
R307
R306
R305
S6
B3
S4A
S4B
D352
S5
D503
D502
Q501
Q502
PG
Fsw-ON
ON/OFF
GH
SH
GL
I+
BIAS
MC301
Vda/STB POWER CONTROL MODULE
<Exchange board only>
V+
VCC
OV
HOT
COLD
D505
T501
D508
L502
B1
S2A
S2B
D551
F501
BIAS GND
B2
D506
P2
P1
S1B
S1A
VR351
Vda
IC501
B3
D511
B4
PG_STB
STB_IN
(VDD)
AC_DET
AC_L
AC_N
DISCHG
CONTROL
VBias
GND
GND_S-
GND_OVP
Vo_S+
Vo_WP
AC DET
MC601
POWER CONTROL
MODULE
<Exchange board only>
MC701
POWER MCU MODULE
<exchange board only>

TH-50PV60A
P-Board Block Diagram

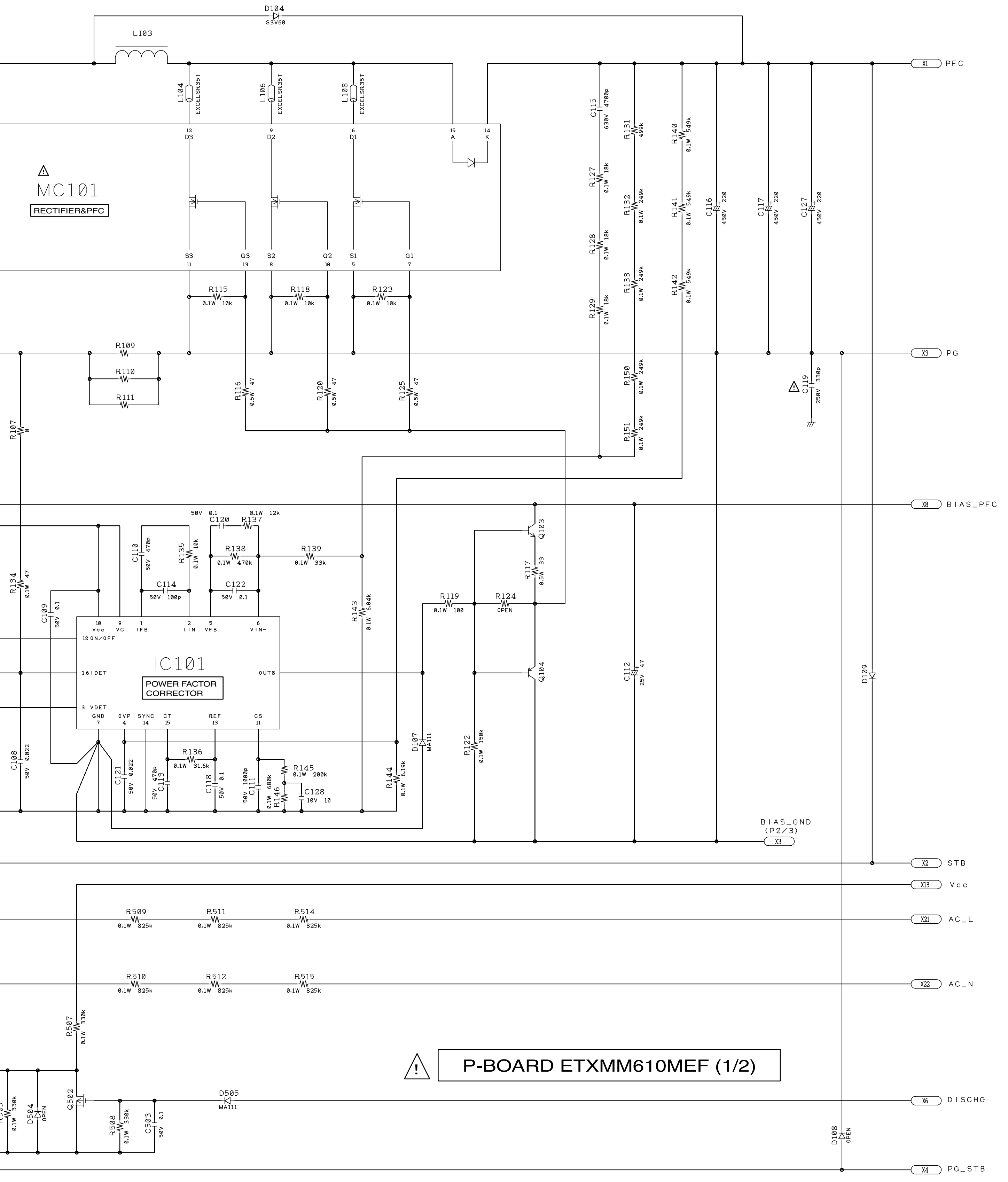

HOT
COLD
Vsus 180V
D251
D255
D253
D254
VR251
VSUS
R253
R254
R255
R258
R259
R260
R261
P2 TO SC2
VSUS
GND
P11 TO SS11
VSUS
GND
MC202
Vsus
POWER SUPPLY
<Exchange board only>
PG
SL
VDD
OV
VCC
STOP
V+
D252
VSUS-OUT
P23 TO SC23
15Vd
15Vd
P5 TO PA5
15Vs
15Vs
15Vs
15Vc
15Vc
15Vc
MC201
Vsus
POWER SUPPLY
<Exchange board only>
PC505
PC506
PFC_ON/OFF
PC503
BIAS_ON/OFF
Q553
T301
D402
SW
Q401
Vda_ON
Q402
Q403
SW
Q404
SW
Q405
Q406
ZD407
L401
VR401
Vda
ZD405
ZD406
ZD408
IC401
Vda DET
P12 TO SS12
VDA
VDA
15Vd
SW_MAIN
STB_PS
MAIN SW
D403
D355
Q351
15V_ON
Q353
ZD351
Q352
Q354
F15V_ON
ZD353
D352
5V_ON
Q552
D555
Q551
STB-ON/OFF
D554
D556
P25 TO D25
+5VC
+5VC
STB5V
15Vc
15Vc
ALL_OFF
PS_SOS
H=SOS
L=OK
PANEL_ON
F_STB_ON
Vda_Low(Vda_DET)
P10 TO PA10
F_STB_15V
F_STB_15V
F_STB_15V
STB_IN (VDD)
15V_IN
BIAS_ON
PFC_ON
Vda_ON
F15V_ON
15V_ON
SUS_ON
SUS_STOP
STB_ON
STB_ON
STB_OUT
5VC_ON
Vda_OUT
SW_MAIN
5VC_OUT
15V_OUT
SUS_OUT
ALL_OFF
F_STB_ON
PANEL_ON
PS_SOS
Vda_LOW
MC701
R MCU MODULE
nge board only>
P07
AD1
P03
P14
P06
P12
P30
P05
P02
AD0
P04
AD2
P11
AD4
P20
P10
P13
AD5
P01
P21
P22
P00
P31
POWER MCU

TH-50PV60A
P-Board Block Diagram

14.4. P-Board (1 of 2) Schematic Diagram

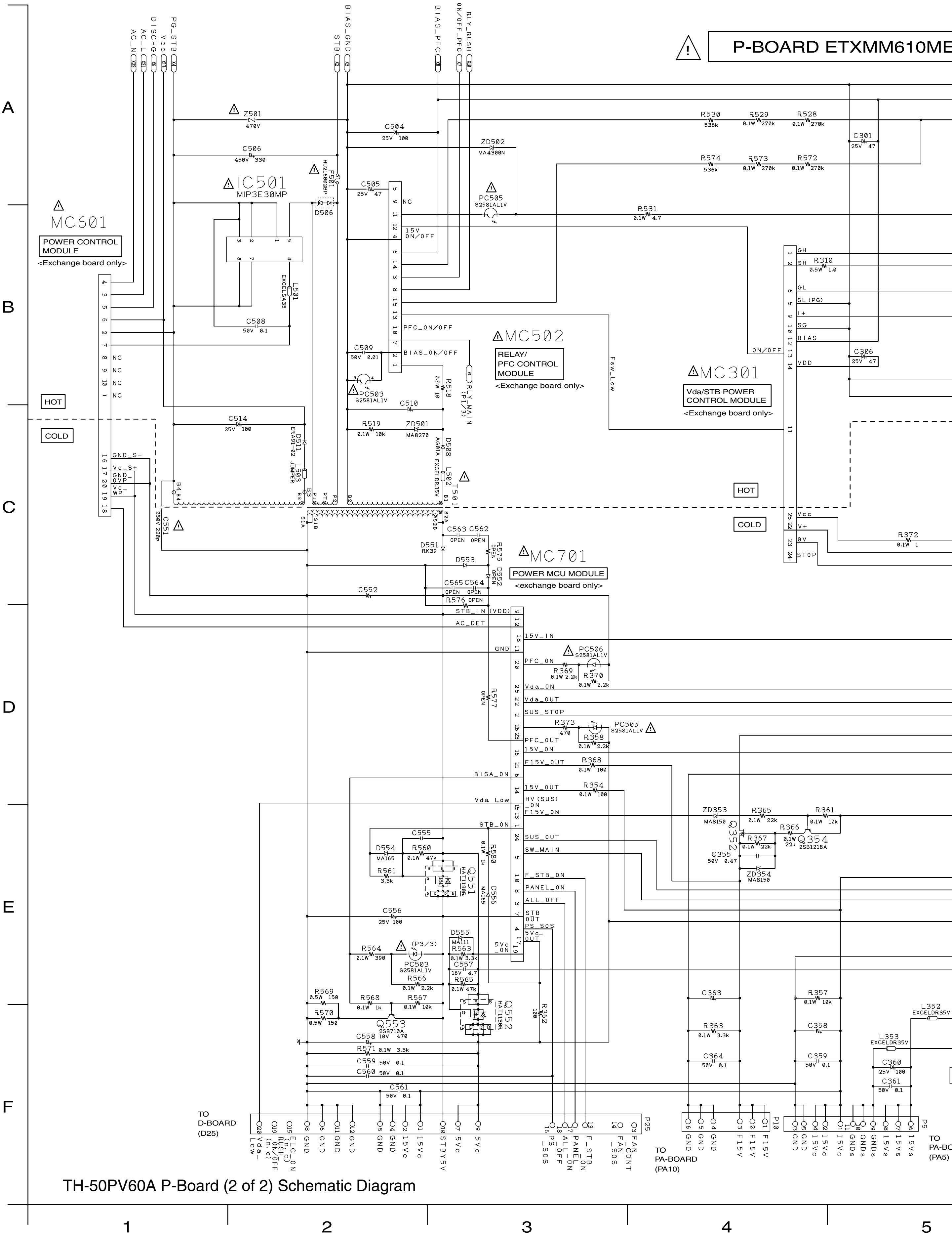

A
B
C
D
E
F
1
2
3
4
5
P9
B3P4VH-B-L
AC_IN
F101
OPEN
F102
OPEN
Z101
750V
C101
& 1
R101
1.8M
Z102
470V
A101
3.6kV
A102
3.6kV
L101
7.0A 8mH
L102
7.0A 8mH
GA
GA
RF101
HUA5MC100JP2
R103
5W 10
K101
DG12D1-0
K102
D101
MA111
D102
MA111
X10
RLY_RUSH
X9
RLY_MAIN
C104
250V 100p
C102
& 0.22
C103
250V 100p
MC101
RECTIFIER&PFC
3 AC
2 AC
1
DC(+)
DC(-)
4
C106
450V
C107
450V
R104
0.1W 121k
R105
0.1W 121k
R106
0.1W 121k
R108
0.1W 121k
R107
0
R147
0.1W 39k
R113
0.1W 33k
C123
50V 0.1
R130
0.1W 100k
R134
0.1W 47
C109
50V 0.1
10
Vcc
12 ON/O
16 IDET
3 VDET
GND
7
ON/OFF_PFC
(P2/3)
X7
Q106
2SD1819A
C515
50V 0.1
PC506
S2581AL1V
R149
0.1W 39k
C129
50V 0.1
R114
0.1W 2.7k
ZD101
MA8051
C105
OPEN
C108
50V 0.022
D501
S1WBA80
AC +
AC −
C501
& 0.047
D503
ERA22-10
R503
0.5W 470k
D502
ERA22-10
R501
0.5W 470k
Q501
2SK3302
C502
50V 0.1
R505
0.1W 330k
D504
OPEN
R507
0.1W 330k
Q502

TH-50PV60A P-Board (1 of 2) Schematic Diagram

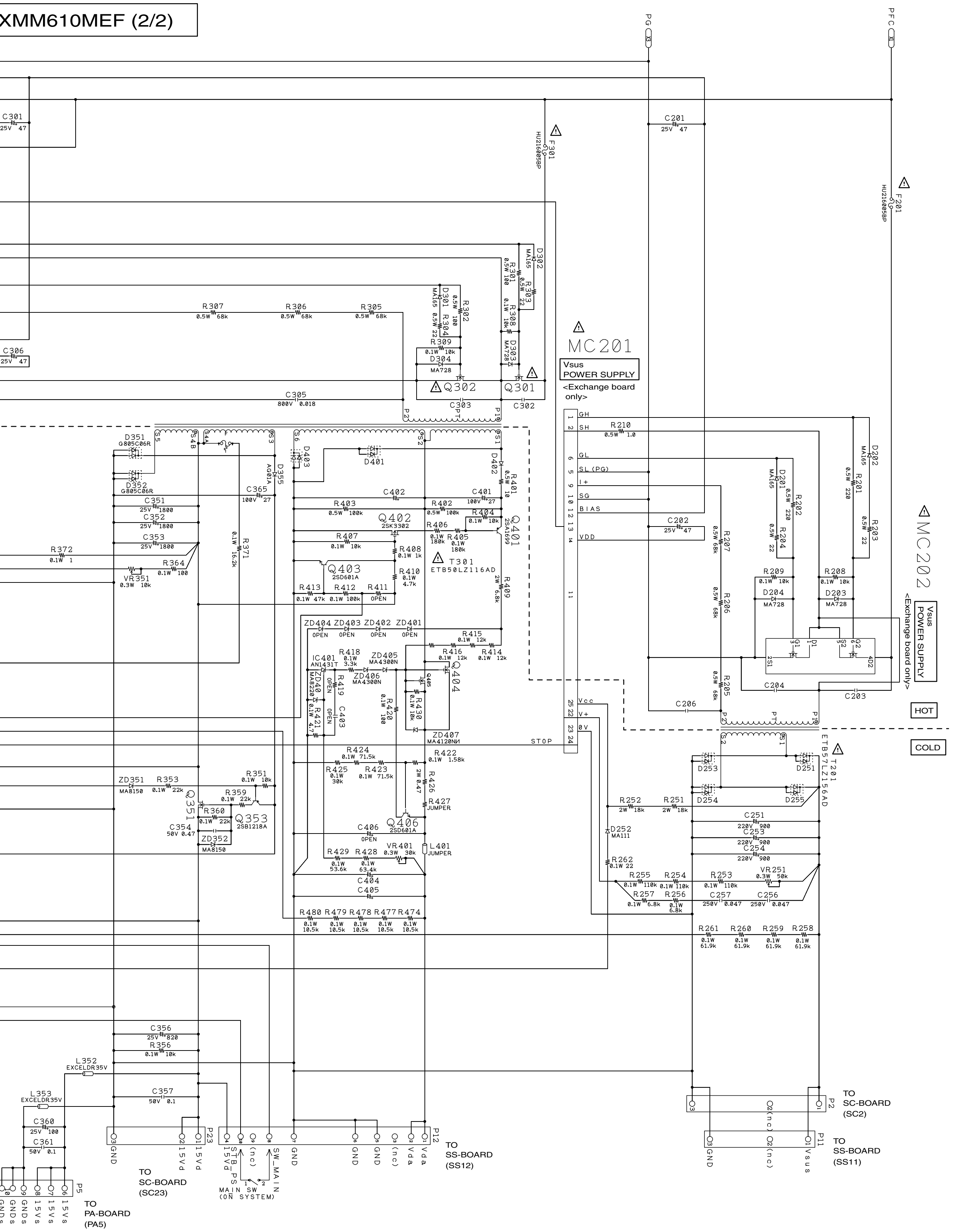

D104
S3V60
L103
L104
EXCELSR35T
L106
EXCELSR35T
L108
EXCELSR35T
MC101
RECTIFIER&PFC
12 D3
9 D2
6 D1
15 A
14 K
S3 11
G3 13
S2 8
G2 10
S1 5
G1 7
R115 0.1W 10k
R118 0.1W 10k
R123 0.1W 10k
R109
R110
R111
R107 0
R116 0.5W 47
R120 0.5W 47
R125 0.5W 47
C115 630V 4700p
R127 0.1W 18k
R128 0.1W 18k
R129 0.1W 18k
R131 499k
R132 0.1W 249k
R133 0.1W 249k
R150 0.1W 249k
R151 0.1W 249k
R140 0.1W 549k
R141 0.1W 549k
R142 0.1W 549k
C116 450V 220
C117 450V 220
C127 450V 220
C119 250V 330p
X1 PFC
X3 PG
X8 BIAS_PFC
C120 50V 0.1
R137 0.1W 12k
C110 50V 470p
R135 0.1W 10k
R138 0.1W 470k
R139 0.1W 33k
C114 50V 100p
C122 50V 0.1
R134 0.1W 47
C109 50V 0.1
R143 0.1W 6.04k
Q103
R117 0.5W 33
R119 0.1W 100
R124 OPEN
IC101
POWER FACTOR CORRECTOR
10 Vcc
9 VC
1 IFB
2 IIN
5 VFB
6 VIN-
12 ON/OFF
16 IDET
3 VDET
OUT 8
GND 7
OVP 4
SYNC 14
CT 15
REF 13
CS 11
Q104
C112 25V 47
D109
C108 50V 0.022
C121 50V 0.022
C113 50V 470p
R136 0.1W 31.6k
C118 50V 0.1
C111 50V 1000p
R146 0.1W 680k
R145 0.1W 200k
C128 10V 10
R144 0.1W 6.19k
D107 MA111
R122 0.1W 150k
BIAS_GND (P2/3)
X3
X2 STB
X13 Vcc
R509 0.1W 825k
R511 0.1W 825k
R514 0.1W 825k
X21 AC_L
R510 0.1W 825k
R512 0.1W 825k
R515 0.1W 825k
X22 AC_N
R507 0.1W 330k
P-BOARD ETXMM610MEF (1/2)
Q502
D504 OPEN
R508 0.1W 330k
C503 50V 0.1
D505 MA111
X6 DISCHG
D108 OPEN
X4 PG_STB

TH-50PV60A P-Board (1 of 2) Schematic Diagram

14.5. P-Board (2 of 2) Schematic Diagram


P-BOARD ETXMM610ME
A
B
C
D
E
F
1
2
3
4
5
AC_N
AC_L
DISCHG
Vcc
PG_STB
STB
BIAS_GND
BIAS_PFC
ON/OFF_PFC
RLY_RUSH
MC601
POWER CONTROL MODULE
<Exchange board only>
IC501
MIP3E30MP
Z501
470V
C506
450V 330
C504
25V 100
F501
D506
C505
25V 47
ZD502
MA4300N
PC505
S2581AL1V
L501
EXCELSA35
C508
50V 0.1
C509
50V 0.01
PC503
S2581AL1V
R518
C510
R519
0.1W 10k
ZD501
MA8270
15V ON/OFF
PFC_ON/OFF
BIAS_ON/OFF
NC
RLY_MAIN (P1/3)
MC502
RELAY/ PFC CONTROL MODULE
<Exchange board only>
R530
536k
R529
0.1W 270k
R528
0.1W 270k
C301
25V 47
R574
536k
R573
0.1W 270k
R572
0.1W 270k
R531
0.1W 4.7
GH
SH
R310
0.5W 1.0
GL
SL(PG)
I+
SG
BIAS
VDD
ON/OFF
C306
25V 47
Fsw_Low
MC301
Vda/STB POWER CONTROL MODULE
<Exchange board only>
HOT
COLD
C514
25V 100
D511
ERA91-02
L503
JUMPER
D508
AG01A
L502
EXCELDR35V
T501
GND_S-
Vo_S+
GND_OVP
Vo_WP
C551
250V 220p
Vcc
V+
0V
STOP
R372
0.1W 1
C563
C562
OPEN
D551
RK39
D553
R575
D552
MC701
POWER MCU MODULE
<exchange board only>
C552
C565
C564
R576 OPEN
STB_IN (VDD)
AC_DET
GND
15V_IN
PFC_ON
PC506
S2581AL1V
R369
0.1W 2.2k
R370
0.1W 2.2k
Vda_ON
Vda_OUT
SUS_STOP
R577
R373
470
R358
0.1W 2.2k
PC505
S2581AL1V
PFC_OUT
15V_ON
F15V_OUT
R368
0.1W 100
BISA_ON
15V_OUT
R354
0.1W 100
Vda_Low
HV (SUS) _ON
F15V_ON
ZD353
MA8150
R365
0.1W 22k
R361
0.1W 10k
Q352
R366
0.1W 22k
R367
0.1W 22k
Q354
2SB1218A
C355
50V 0.47
ZD354
MA8150
STB_ON
SUS_OUT
SW_MAIN
C555
D554
MA165
R560
0.1W 47k
R561
3.3k
R580
0.1W 1k
Q551
HAT1130R
D556
MA165
F_STB_ON
PANEL_ON
ALL_OFF
STB OUT
PS_SOS
5Vc-OUT
5Vc_ON
C556
25V 100
D555
MA111
R563
0.1W 3.3k
C557
16V 4.7
R565
0.1W 47k
R564
0.1W 390
PC503
S2581AL1V
(P3/3)
R566
0.1W 2.2k
R569
0.5W 150
R568
0.1W 1k
R567
0.1W 10k
R570
0.5W 150
Q553
2SB710A
Q552
HAT1130R
R362
100
C558
10V 470
R571
0.1W 3.3k
C559
50V 0.1
C560
50V 0.1
C561
50V 0.1
C363
R363
0.1W 3.3k
C364
50V 0.1
R357
0.1W 10k
C358
C359
50V 0.1
L352
EXCELDR35V
L353
EXCELDR35V
C360
25V 100
C361
50V 0.1
TO D-BOARD (D25)
P25
Vda_Low
ELC_ON (n.c)
RUSH_ON/OFF (n.c)
GND
15Vc
STBY5V
5Vc
PS_SOS
ALL_OFF
PANEL_ON
F_STB_ON
FAN_SOS
FAN_CONT
TO PA-BOARD (PA10)
P10
F15V
TO PA-BOARD (PA5)
P5
GNDs
15Vs

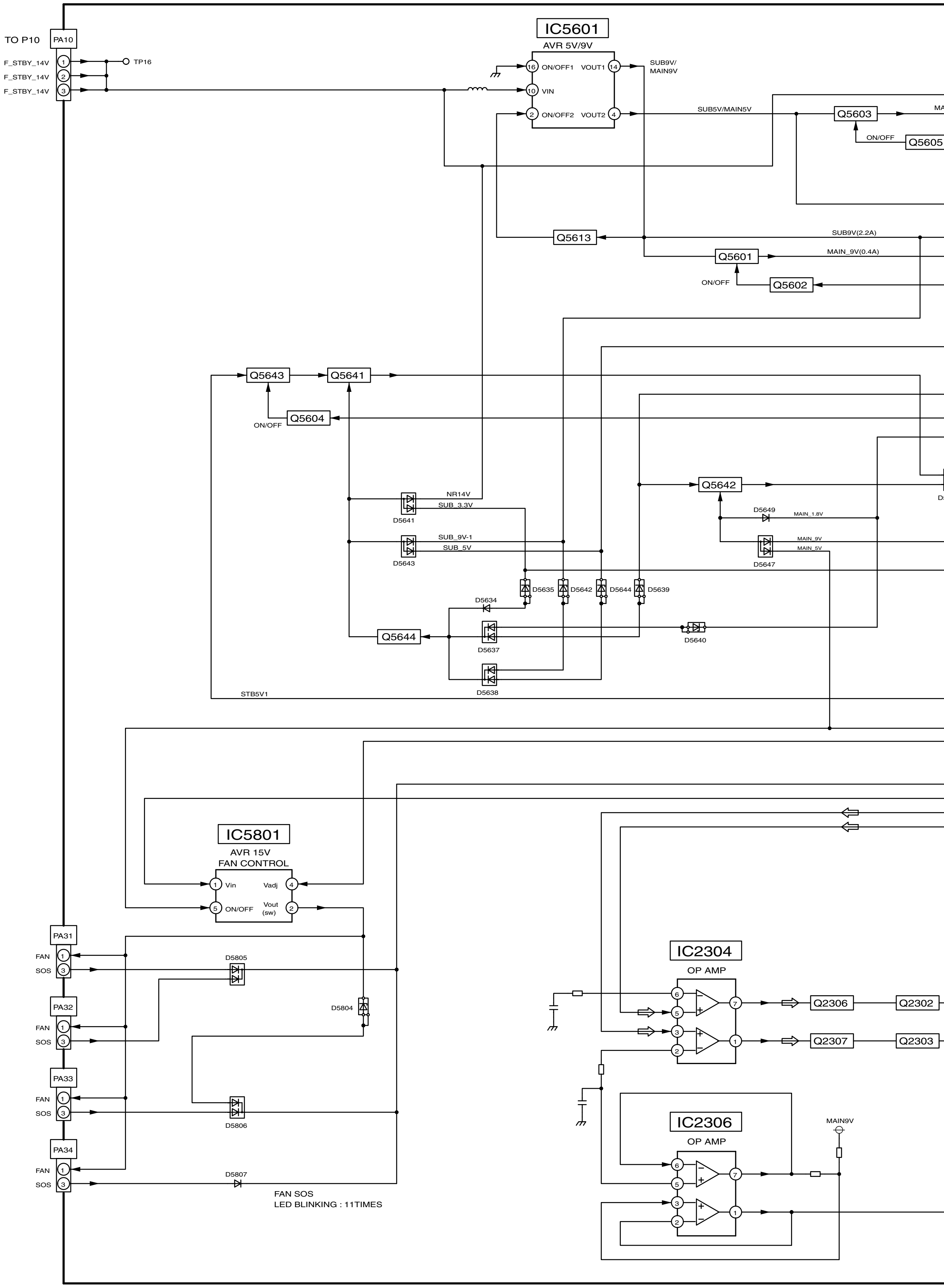
TH-50PV60A P-Board (2 of 2) Schematic Diagram


XMM610MEF (2/2)
PG
PFC
C301 25V 47
C201 25V 47
F301 HU2160058P
F201 HU2160058P
D302 MA165
R303 0.5W 22
R301 0.5W 100
R302 0.5W 100
D301 MA165
R304 0.5W 22
R308 0.1W 10k
D303 MA728
R307 0.5W 68k
R306 0.5W 68k
R305 0.5W 68k
R309 0.1W 10k
D304 MA728
C306 25V 47
MC201
Vsus POWER SUPPLY
<Exchange board only>
Q302
Q301
C305 800V 0.018
C303
C302
P2
PT
P1
GH
SH
GL
SL (PG)
I+
SG
BIAS
VDD
Vcc
V+
0V
STOP
R210 0.5W 1.0
D351 G805C06R
D352 G805C06R
D355 AG01A
D403
D401
D402
R401 0.5W 10
C365 100V 27
C351 25V 1800
C352 25V 1800
C353 25V 1800
C402
C401 100V 27
R403 0.5W 100k
R402 0.5W 100k
R404 0.1W 10k
Q402 2SK3302
Q401 2SA1699
R406
R405 0.1W 180k
R407 0.1W 10k
R408 0.1W 1k
R372 0.1W 1
R371 0.1W 16.2k
R364 0.1W 100
VR351 0.3W 10k
Q403 2SD601A
T301 ETB50LZ116AD
R410 0.1W 4.7k
R409 2W 6.8k
R413 0.1W 47k
R412 0.1W 100k
R411 OPEN
ZD404 ZD403 ZD402 ZD401
OPEN OPEN OPEN OPEN
R415 0.1W 12k
R416 0.1W 12k
R414 0.1W 12k
R418 0.1W 3.3k
IC401 AN1431T
ZD405 MA4300N
ZD406 MA4300N
ZD40 MA8220
R419 OPEN
R421 0.1W 4.7
C403 OPEN
R420 0.1W 100
R430 0.1W 10k
Q404
Q405
ZD407 MA4120N1
R424 0.1W 71.5k
R425 0.1W 30k
R423 0.1W 71.5k
R422 0.1W 1.58k
R426 2W 0.47
R427 JUMPER
ZD351 MA8150
R353 0.1W 22k
Q351
R351 0.1W 10k
R359 0.1W 22k
R360 0.1W 22k
Q353 2SB1218A
C354 50V 0.47
ZD352 MA8150
C406 OPEN
Q406 2SD601A
VR401 0.3W 30k
L401 JUMPER
R429 0.1W 53.6k
R428 0.1W 63.4k
C404
C405
R480 R479 R478 R477 R474
0.1W 10.5k
C356 25V 820
R356 0.1W 10k
L352 EXCELDR35V
L353 EXCELDR35V
C357 50V 0.1
C360 25V 100
C361 50V 0.1
P23
GND
15Vd
STB_PS
(nc)
SW_MAIN
MAIN SW (ON SYSTEM)
P12
Vda
TO SC-BOARD (SC23)
TO SS-BOARD (SS12)
P5
GNDs
15Vs
TO PA-BOARD (PA5)
D202 MA165
R201 0.5W 220
D201 MA165
R202 0.5W 220
R203 0.5W 22
R204 0.5W 22
MC202
Vsus POWER SUPPLY
<Exchange board only>
C202 25V 47
R207 0.5W 68k
R206 0.5W 68k
R205 0.5W 68k
R209 0.1W 10k
R208 0.1W 10k
D204 MA728
D203 MA728
G1 S1 D1 S2 G2 D2
2S1
4D2
C204
C203
C206
HOT
COLD
T201 ETB57LZ156AD
D253 D251
D254 D255
R252 2W 18k
R251 2W 18k
D252 MA111
C251 220V 900
C253 220V 900
C254 220V 900
R262 0.1W 22
R255 0.1W 110k
R254 0.1W 110k
R253 0.1W 110k
VR251 0.3W 50k
R257 0.1W 6.8k
R256 0.1W 6.8k
C257 250V 0.047
C256 250V 0.047
R261 0.1W 61.9k
R260 0.1W 61.9k
R259 0.1W 61.9k
R258 0.1W 61.9k
P2
TO SC-BOARD (SC2)
P11
Vsus
TO SS-BOARD (SS11)

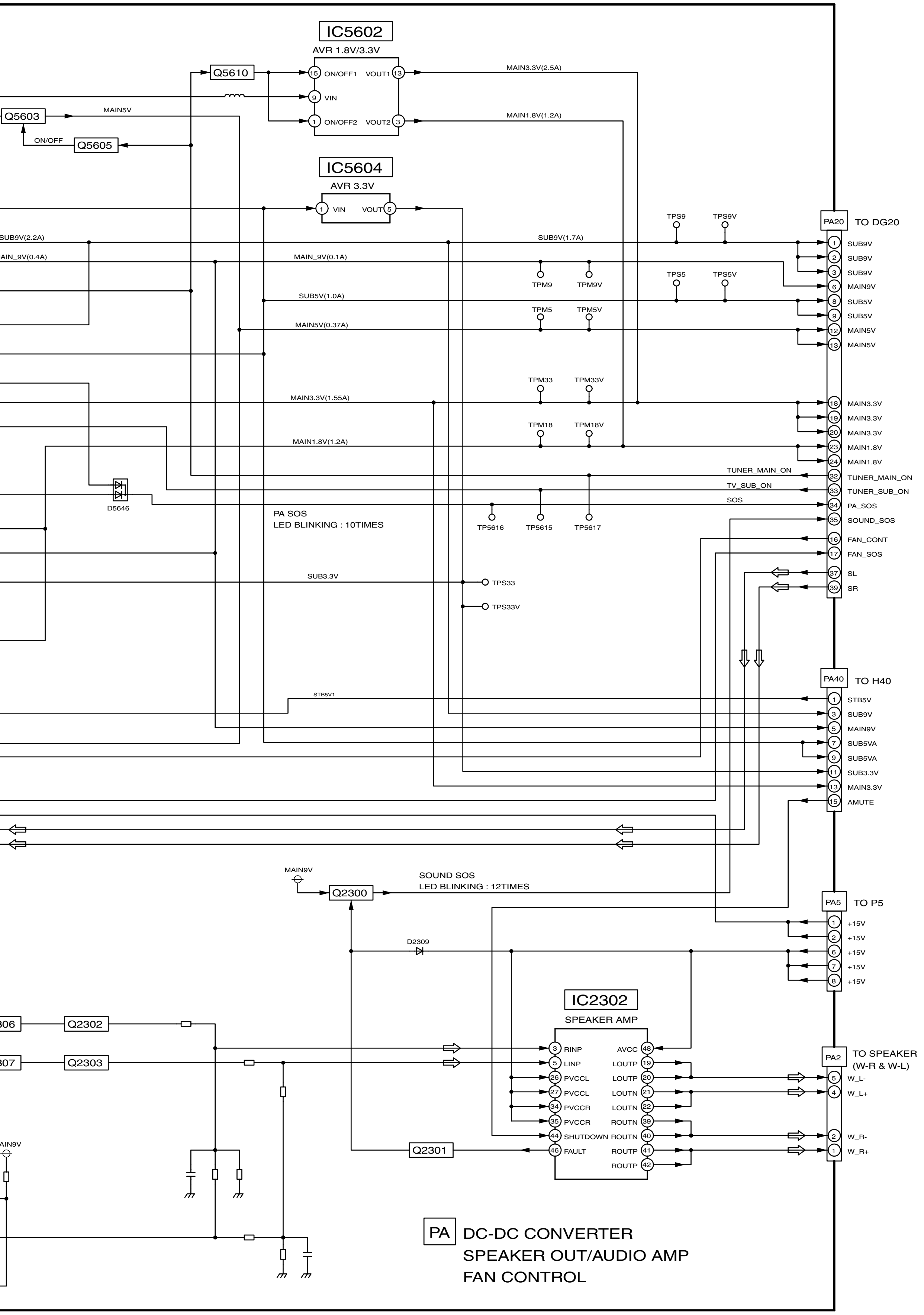
TH-50PV60A P-Board (2 of 2) Schematic Diagram

5 6 7 8 9

14.6. PA-Board Block Diagram

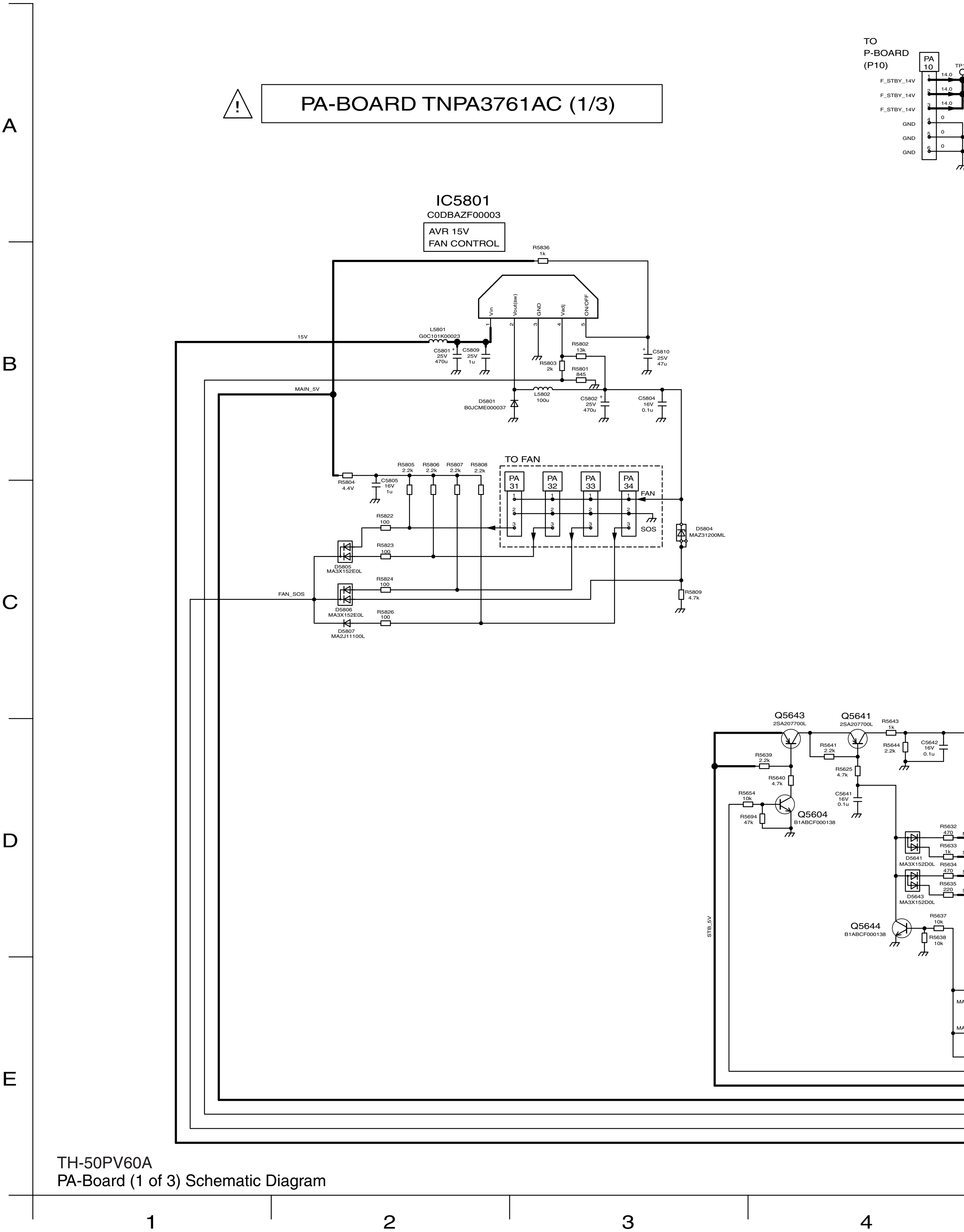

TO P10
PA10
F_STBY_14V
F_STBY_14V
F_STBY_14V
TP16
IC5601
AVR 5V/9V
ON/OFF1
VOUT1
VIN
ON/OFF2
VOUT2
SUB9V/
MAIN9V
SUB5V/MAIN5V
Q5603
ON/OFF
Q5605
Q5613
SUB9V(2.2A)
Q5601
MAIN_9V(0.4A)
ON/OFF
Q5602
Q5643
Q5641
Q5604
ON/OFF
NR14V
SUB_3.3V
D5641
SUB_9V-1
SUB_5V
D5643
Q5642
D5649
MAIN_1.8V
MAIN_9V
MAIN_5V
D5647
D5635
D5642
D5644
D5639
D5634
Q5644
D5637
D5640
D5638
STB5V1
IC5801
AVR 15V
FAN CONTROL
Vin
Vadj
ON/OFF
Vout
(sw)
PA31
FAN
SOS
D5805
D5804
PA32
FAN
SOS
PA33
FAN
SOS
D5806
PA34
FAN
SOS
D5807
FAN SOS
LED BLINKING : 11TIMES
IC2304
OP AMP
Q2306
Q2302
Q2307
Q2303
IC2306
OP AMP
MAIN9V

TH-50PV60A
PA-Board Block Diagram

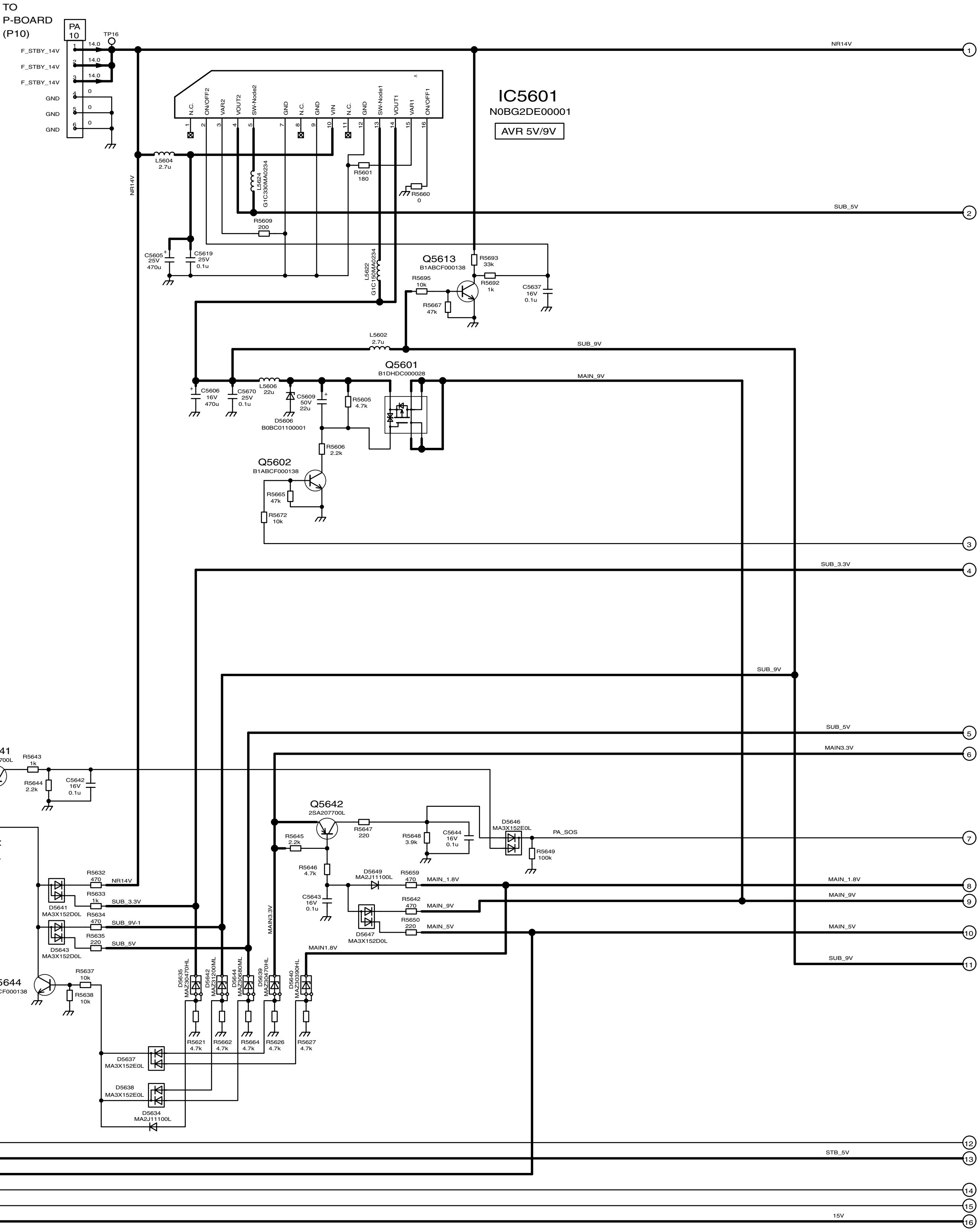

IC5602
AVR 1.8V/3.3V
Q5610
15 ON/OFF1
VOUT1 13
9 VIN
1 ON/OFF2
VOUT2 3
MAIN3.3V(2.5A)
MAIN1.8V(1.2A)
Q5603
MAIN5V
ON/OFF
Q5605
IC5604
AVR 3.3V
1 VIN
VOUT 5
SUB9V(2.2A)
AIN_9V(0.4A)
MAIN_9V(0.1A)
SUB9V(1.7A)
SUB5V(1.0A)
MAIN5V(0.37A)
MAIN3.3V(1.55A)
MAIN1.8V(1.2A)
TPS9
TPS9V
TPM9
TPM9V
TPS5
TPS5V
TPM5
TPM5V
TPM33
TPM33V
TPM18
TPM18V
D5646
TUNER_MAIN_ON
TV_SUB_ON
SOS
PA SOS
LED BLINKING : 10TIMES
TP5616
TP5615
TP5617
SUB3.3V
TPS33
TPS33V
PA20
TO DG20
1 SUB9V
2 SUB9V
3 SUB9V
6 MAIN9V
8 SUB5V
9 SUB5V
12 MAIN5V
13 MAIN5V
18 MAIN3.3V
19 MAIN3.3V
20 MAIN3.3V
23 MAIN1.8V
24 MAIN1.8V
32 TUNER_MAIN_ON
33 TUNER_SUB_ON
34 PA_SOS
35 SOUND_SOS
16 FAN_CONT
17 FAN_SOS
37 SL
39 SR
STB5V1
PA40
TO H40
1 STB5V
3 SUB9V
5 MAIN9V
7 SUB5VA
9 SUB5VA
11 SUB3.3V
13 MAIN3.3V
15 AMUTE
MAIN9V
Q2300
SOUND SOS
LED BLINKING : 12TIMES
PA5
TO P5
1 +15V
2 +15V
6 +15V
7 +15V
8 +15V
D2309
IC2302
SPEAKER AMP
306
Q2302
307
Q2303
AIN9V
3 RINP
5 LINP
26 PVCCL
27 PVCCL
34 PVCCR
35 PVCCR
44 SHUTDOWN
46 FAULT
AVCC 48
LOUTP 19
LOUTP 20
LOUTN 21
LOUTN 22
ROUTN 39
ROUTN 40
ROUTP 41
ROUTP 42
Q2301
PA2
TO SPEAKER
(W-R & W-L)
5 W_L-
4 W_L+
2 W_R-
1 W_R+
PA
DC-DC CONVERTER
SPEAKER OUT/AUDIO AMP
FAN CONTROL

TH-50PV60A
PA-Board Block Diagram

14.7. PA-Board (1 of 3) Schematic Diagram


A
B
C
D
E
1
2
3
4
PA-BOARD TNPA3761AC (1/3)
TO
P-BOARD
(P10)
PA 10
TP1
F_STBY_14V
F_STBY_14V
F_STBY_14V
GND
GND
GND
14.0
14.0
14.0
0
0
0
IC5801
C0DBAZF00003
AVR 15V
FAN CONTROL
Vin
Vout(sw)
GND
Vadj
ON/OFF
R5836 1k
15V
MAIN_5V
L5801 G0C101K00023
C5801 25V 470u
C5809 25V 1u
R5802 13k
R5803 2k
R5801 845
C5810 25V 47u
D5801 B0JCME000037
L5802 100u
C5802 25V 470u
C5804 16V 0.1u
R5804 4.4V
C5805 16V 1u
R5805 2.2k
R5806 2.2k
R5807 2.2k
R5808 2.2k
TO FAN
PA 31
PA 32
PA 33
PA 34
FAN
SOS
D5804 MAZ31200ML
R5809 4.7k
R5822 100
R5823 100
R5824 100
R5826 100
D5805 MA3X152E0L
D5806 MA3X152E0L
D5807 MA2J11100L
FAN_SOS
Q5643 2SA207700L
Q5641 2SA207700L
R5643 1k
R5644 2.2k
C5642 16V 0.1u
R5641 2.2k
R5639 2.2k
R5640 4.7k
R5625 4.7k
C5641 16V 0.1u
R5654 10k
R5694 47k
Q5604 B1ABCF000138
R5632 470
R5633 1k
R5634 470
R5635 220
D5641 MA3X152D0L
D5643 MA3X152D0L
Q5644 B1ABCF000138
R5637 10k
R5638 10k
STB_5V

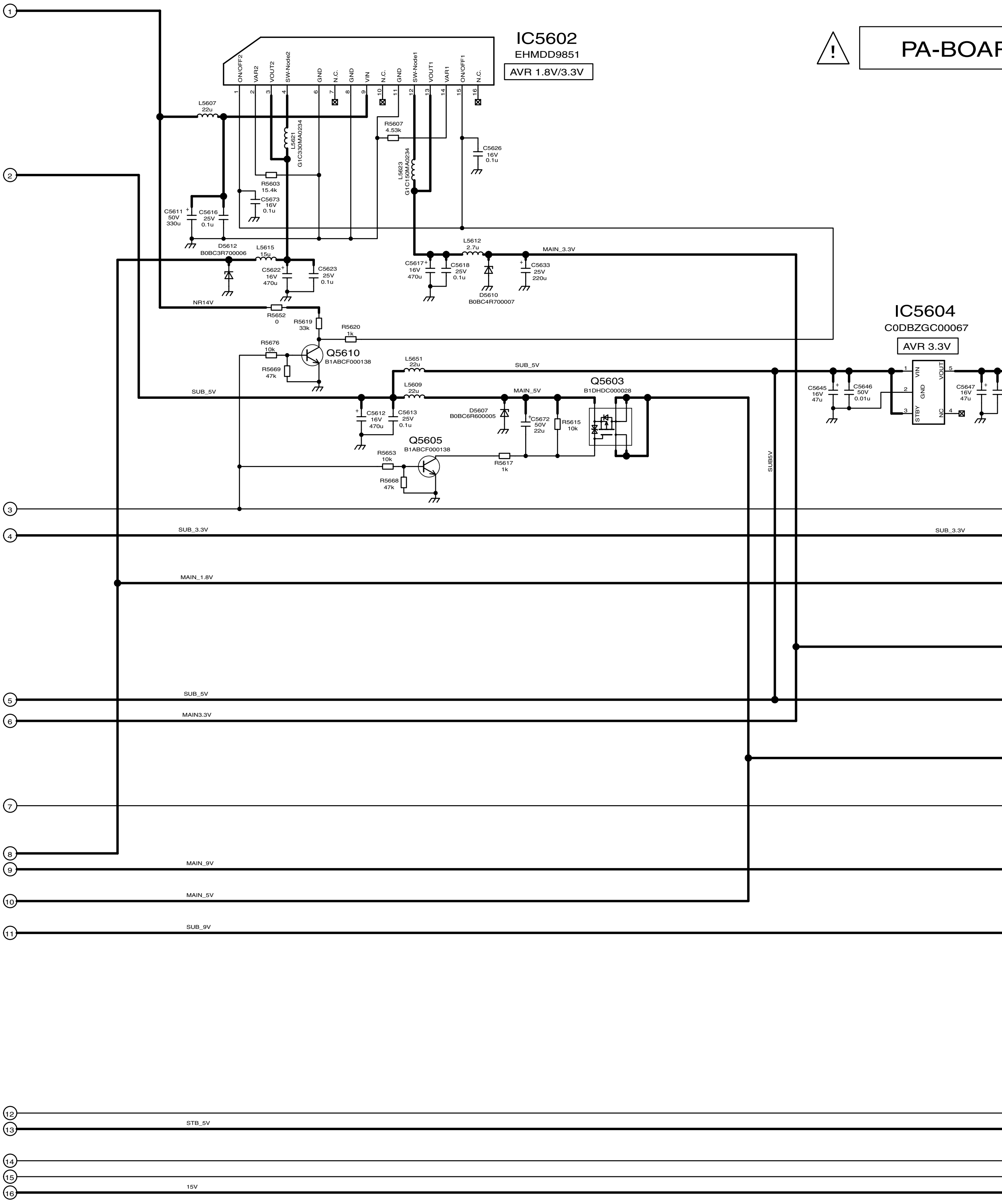
TH-50PV60A
PA-Board (1 of 3) Schematic Diagram


TO
P-BOARD
(P10)
PA
10
TP16
F_STBY_14V
F_STBY_14V
F_STBY_14V
GND
GND
GND
14.0
14.0
14.0
0
0
0
IC5601
N0BG2DE00001
AVR 5V/9V
N.C.
ON/OFF2
VAR2
VOUT2
SW-Node2
GND
N.C.
GND
VIN
N.C.
GND
SW-Node1
VOUT1
VAR1
ON/OFF1
NR14V
L5604
2.7u
L5624
G1C330MA0234
R5601
180
R5660
0
R5609
200
C5605
25V
470u
C5619
25V
0.1u
L5622
G1C150MA0234
Q5613
B1ABCF000138
R5693
33k
R5695
10k
R5692
1k
R5667
47k
C5637
16V
0.1u
SUB_5V
L5602
2.7u
SUB_9V
Q5601
B1DHDC000028
MAIN_9V
C5606
16V
470u
C5670
25V
0.1u
L5606
22u
C5609
50V
22u
D5606
B0BC01100001
R5605
4.7k
R5606
2.2k
Q5602
B1ABCF000138
R5665
47k
R5672
10k
SUB_3.3V
SUB_9V
SUB_5V
MAIN3.3V
R5643
1k
R5644
2.2k
C5642
16V
0.1u
Q5642
2SA207700L
R5645
2.2k
R5647
220
R5648
3.9k
C5644
16V
0.1u
D5646
MA3X152E0L
PA_SOS
R5649
100k
R5646
4.7k
D5649
MA2J11100L
R5659
470
MAIN_1.8V
C5643
16V
0.1u
R5642
470
MAIN_9V
D5647
MA3X152D0L
R5650
220
MAIN_5V
MAIN1.8V
MAIN3.3V
R5632
470
NR14V
R5633
1k
SUB_3.3V
D5641
MA3X152D0L
R5634
470
SUB_9V-1
R5635
220
SUB_5V
D5643
MA3X152D0L
R5637
10k
R5638
10k
D5635
MAZ3047DHL
D5642
MAZ31200ML
D5644
MAZ30680ML
D5639
MAZ30470HL
D5640
MAZ30390HL
R5621
4.7k
R5662
4.7k
R5664
4.7k
R5626
4.7k
R5627
4.7k
D5637
MA3X152E0L
D5638
MA3X152E0L
D5634
MA2J11100L
MAIN_1.8V
MAIN_9V
MAIN_5V
SUB_9V
STB_5V
15V
①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
⑫
⑬
⑭
⑮
⑯

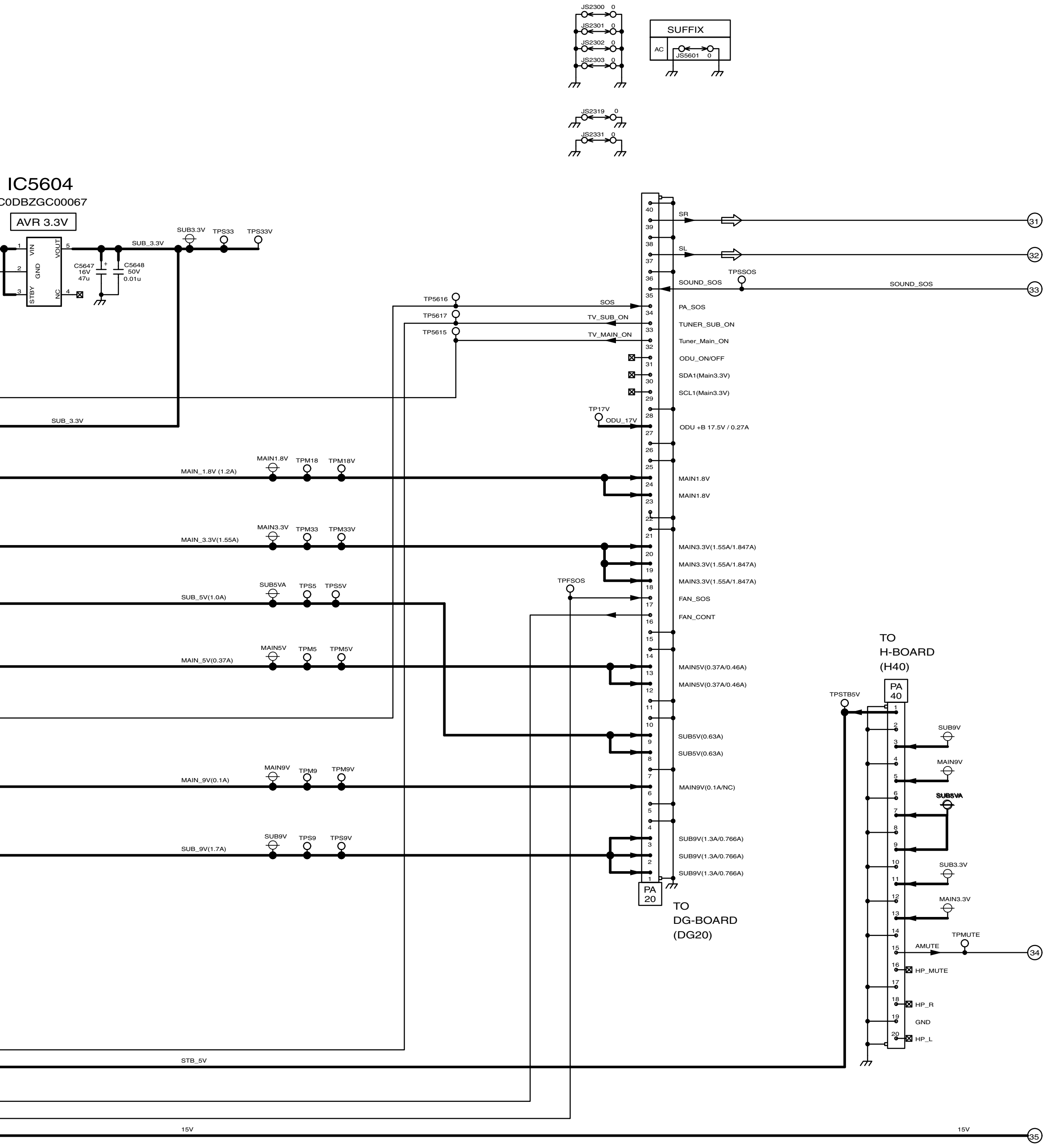
TH-50PV60A
PA-Board (1 of 3) Schematic Diagram

4 5 6 7 8

14.8. PA-Board (2 of 3) Schematic Diagram


IC5602
EHMDD9851
AVR 1.8V/3.3V
ON/OFF2
VAR2
VOUT2
SW-Node2
GND
N.C.
GND
VIN
N.C.
GND
SW-Node1
VOUT1
VAR1
ON/OFF1
N.C.
1
2
3
4
6
7
8
9
10
11
12
13
14
15
16
PA-BOAR
IC5604
C0DBZGC00067
AVR 3.3V
VIN
GND
STBY
VOUT
NC
L5607 22u
L5621 G1C330MA0234
R5607 4.53k
C5626 16V 0.1u
R5603 15.4k
C5673 16V 0.1u
L5623 G1C150MA0234
C5611 50V 330u
C5616 25V 0.1u
D5612 B0BC3R700006
L5615 15u
C5622 16V 470u
C5623 25V 0.1u
L5612 2.7u
MAIN_3.3V
C5617 16V 470u
C5618 25V 0.1u
C5633 25V 220u
D5610 B0BC4R700007
NR14V
R5652 0
R5619 33k
R5620 1k
R5676 10k
Q5610
B1ABCF000138
R5669 47k
L5651 22u
SUB_5V
L5609 22u
Q5603
B1DHDC000028
SUB_5V
MAIN_5V
C5612 16V 470u
C5613 25V 0.1u
D5607 B0BC6R600005
C5672 50V 22u
R5615 10k
Q5605
B1ABCF000138
R5653 10k
R5668 47k
R5617 1k
SUB5V
C5645 16V 47u
C5646 50V 0.01u
C5647 16V 47u
SUB_3.3V
SUB_3.3V
MAIN_1.8V
SUB_5V
MAIN3.3V
MAIN_9V
MAIN_5V
SUB_9V
STB_5V
15V
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

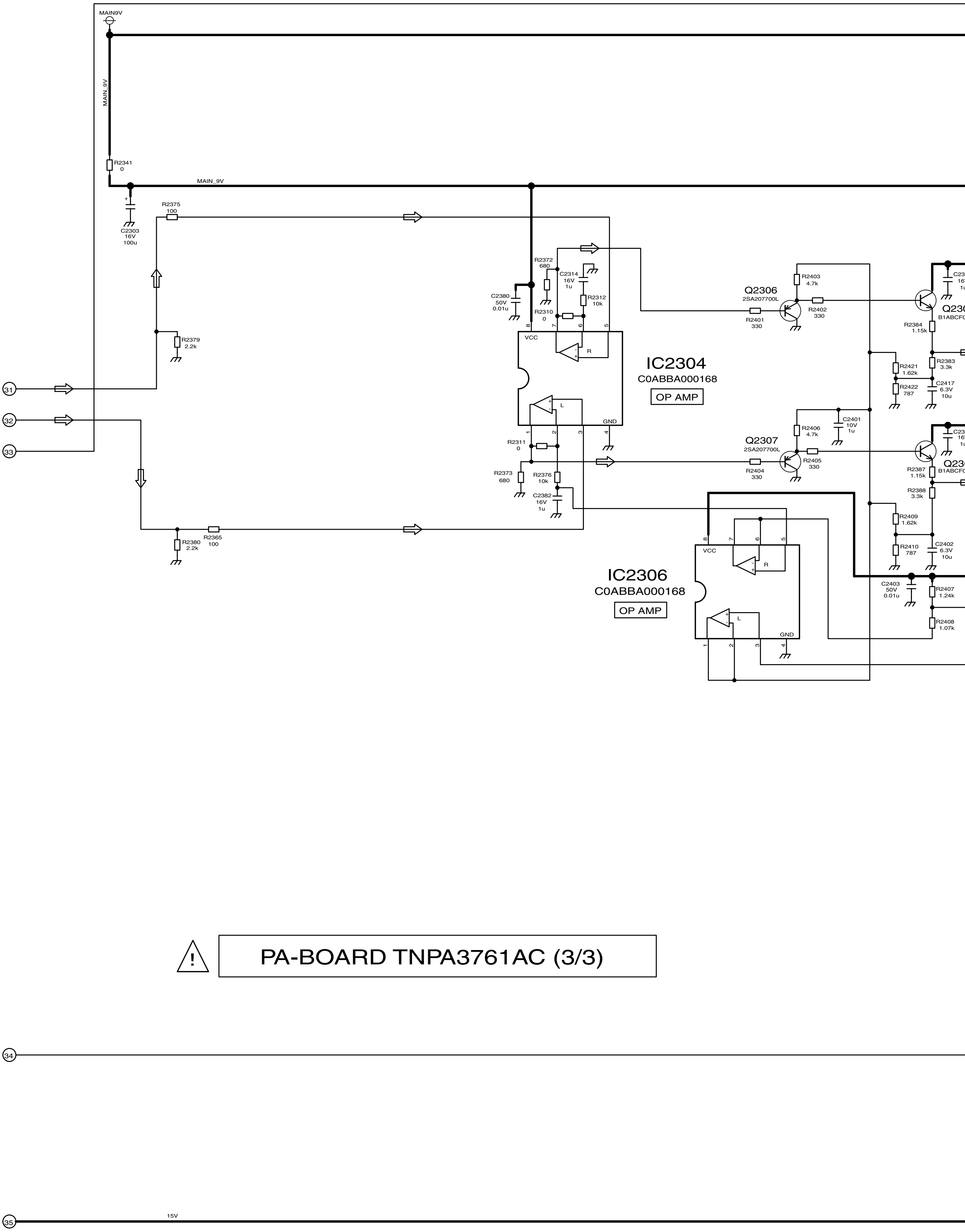
PA-BOARD TNPA3761AC (2/3)

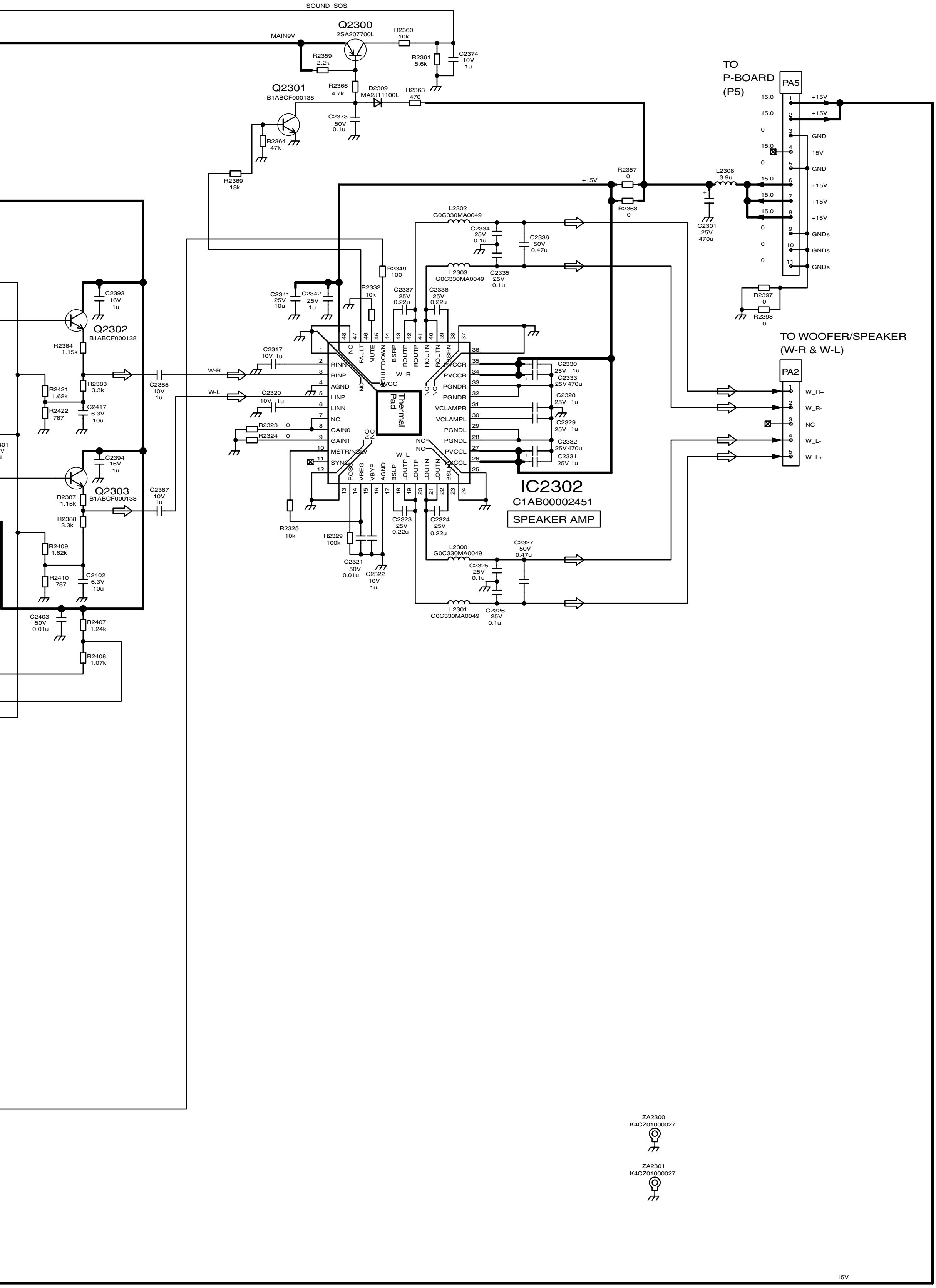

JS2300 0
JS2301 0
JS2302 0
JS2303 0
SUFFIX
AC
JS5601 0
JS2319 0
JS2331 0
IC5604
C0DBZGC00067
AVR 3.3V
1 VIN
2 GND
3 STBY
5 VOUT
4 NC
C5647 16V 47u
C5648 50V 0.01u
SUB_3.3V
SUB3.3V
TPS33
TPS33V
SUB_3.3V
TP5616
TP5617
TP5615
SOS
TV_SUB_ON
TV_MAIN_ON
TP17V
ODU_17V
MAIN1.8V
TPM18
TPM18V
MAIN_1.8V (1.2A)
MAIN3.3V
TPM33
TPM33V
MAIN_3.3V(1.55A)
SUB5VA
TPS5
TPS5V
SUB_5V(1.0A)
TPFSOS
MAIN5V
TPM5
TPM5V
MAIN_5V(0.37A)
MAIN9V
TPM9
TPM9V
MAIN_9V(0.1A)
SUB9V
TPS9
TPS9V
SUB_9V(1.7A)
STB_5V
15V
SR
SL
SOUND_SOS
TPSSOS
SOUND_SOS
PA_SOS
TUNER_SUB_ON
Tuner_Main_ON
ODU_ON/OFF
SDA1(Main3.3V)
SCL1(Main3.3V)
ODU +B 17.5V / 0.27A
MAIN1.8V
MAIN1.8V
MAIN3.3V(1.55A/1.847A)
MAIN3.3V(1.55A/1.847A)
MAIN3.3V(1.55A/1.847A)
FAN_SOS
FAN_CONT
MAIN5V(0.37A/0.46A)
MAIN5V(0.37A/0.46A)
SUB5V(0.63A)
SUB5V(0.63A)
MAIN9V(0.1A/NC)
SUB9V(1.3A/0.766A)
SUB9V(1.3A/0.766A)
SUB9V(1.3A/0.766A)
40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
PA 20
TO DG-BOARD (DG20)
31
32
33
TO H-BOARD (H40)
PA 40
TPSTB5V
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
SUB9V
MAIN9V
SUB5VA
SUB3.3V
MAIN3.3V
AMUTE
TPMUTE
34
HP_MUTE
HP_R
GND
HP_L
15V
35

TH-50PV60A
PA-Board (2 of 3) Schematic Diagram

12 13 14 15

14.9. PA-Board (3 of 3) Schematic Diagram

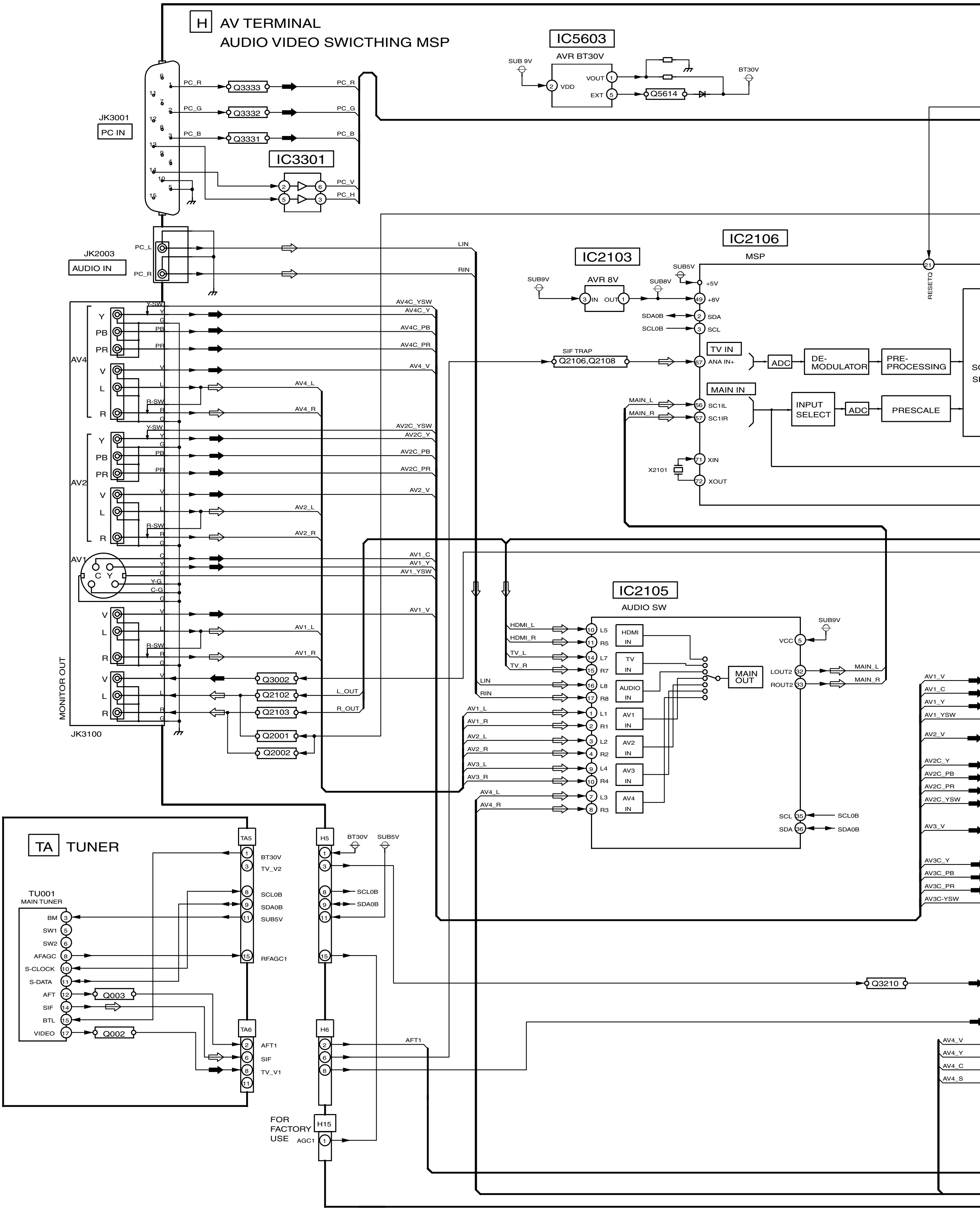

MAIN9V
MAIN_9V
R2341
0
MAIN_9V
C2303
16V
100u
R2375
100
R2379
2.2k
31
32
33
R2380
2.2k
R2365
100
R2372
680
C2314
16V
1u
R2312
10k
R2310
0
C2380
50V
0.01u
VCC
R
L
GND
IC2304
C0ABBA000168
OP AMP
R2311
0
R2373
680
R2376
10k
C2382
16V
1u
Q2306
2SA207700L
R2403
4.7k
R2402
330
R2401
330
Q2307
2SA207700L
R2406
4.7k
C2401
10V
1u
R2404
330
R2405
330
R2384
1.15k
R2383
3.3k
R2421
1.62k
R2422
787
C2417
6.3V
10u
R2387
1.15k
R2388
3.3k
R2409
1.62k
R2410
787
C2402
6.3V
10u
C2403
50V
0.01u
R2407
1.24k
R2408
1.07k
IC2306
C0ABBA000168
OP AMP
VCC
R
L
GND
PA-BOARD TNPA3761AC (3/3)
34
35
15V


SOUND_SOS
MAIN9V
Q2300
2SA207700L
R2360 10k
R2359 2.2k
R2361 5.6k
C2374 10V 1u
Q2301
B1ABCF000138
R2366 4.7k
D2309 MA2J11100L
R2363 470
C2373 50V 0.1u
R2364 47k
R2369 18k
TO P-BOARD (P5)
PA5
15.0
0
+15V
GND
15V
GNDs
NC
R2357 0
R2368 0
L2308 3.9u
C2301 25V 470u
R2397 0
R2398 0
L2302 G0C330MA0049
C2334 25V 0.1u
C2336 50V 0.47u
L2303 G0C330MA0049
C2335 25V 0.1u
R2349 100
R2332 10k
C2337 25V 0.22u
C2338 25V 0.22u
C2341 25V 10u
C2342 25V 1u
C2393 16V 1u
Q2302
B1ABCF000138
R2384 1.15k
R2383 3.3k
R2421 1.62k
R2422 787
C2417 6.3V 10u
C2385 10V 1u
W-R
W-L
C2317 10V 1u
C2320 10V 1u
R2323 0
R2324 0
NC
FAULT
MUTE
SHUTDOWN
BSRP
ROUTP
ROUTN
BSRN
RINN
RINP
AGND
LINP
LINN
GAIN0
GAIN1
MSTR/SLV
SYNC
VCC
Thermal Pad
W_R
W_L
PVCCR
PGNDR
VCLAMPR
VCLAMPL
PGNDL
PVCCL
ROSC
VREG
VBYP
BSLP
LOUTP
LOUTN
BSLN
C2330 25V 1u
C2333 25V 470u
C2328 25V 1u
C2329 25V 1u
C2332 25V 470u
C2331 25V 1u
IC2302
C1AB00002451
SPEAKER AMP
TO WOOFER/SPEAKER (W-R & W-L)
PA2
W_R+
W_R-
W_L-
W_L+
C2394 16V 1u
Q2303
B1ABCF000138
R2387 1.15k
R2388 3.3k
C2387 10V 1u
R2409 1.62k
R2410 787
C2402 6.3V 10u
C2403 50V 0.01u
R2407 1.24k
R2408 1.07k
R2325 10k
R2329 100k
C2321 50V 0.01u
C2322 10V 1u
C2323 25V 0.22u
C2324 25V 0.22u
L2300 G0C330MA0049
C2327 50V 0.47u
C2325 25V 0.1u
L2301 G0C330MA0049
C2326 25V 0.1u
ZA2300 K4CZ01000027
ZA2301 K4CZ01000027
15V

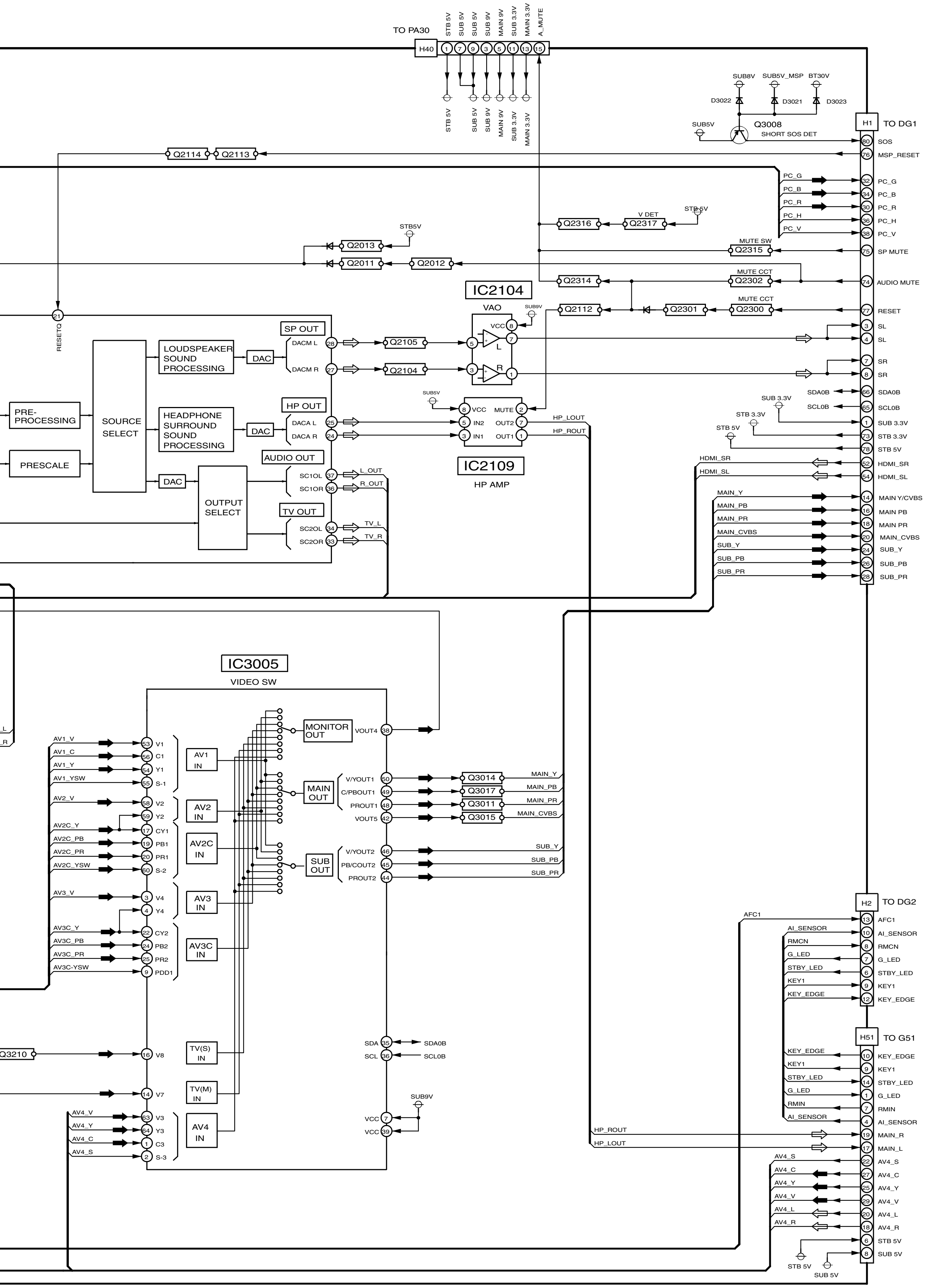
TH-50PV60A
PA-Board (3 of 3) Schematic Diagram

9 20 21 22 23

14.10. H and TA-Board Block Diagram


H
AV TERMINAL
AUDIO VIDEO SWICTHING MSP
IC5603
AVR BT30V
SUB 9V
VDD
VOUT
EXT
Q5614
BT30V
JK3001
PC IN
PC_R
PC_G
PC_B
Q3333
Q3332
Q3331
IC3301
PC_V
PC_H
JK2003
AUDIO IN
PC_L
PC_R
LIN
RIN
IC2106
MSP
IC2103
AVR 8V
SUB9V
SUB8V
SUB5V
IN
OUT
+5V
+8V
SDA0B
SCL0B
SDA
SCL
RESET0
SIF TRAP
Q2106,Q2108
TV IN
ANA IN+
ADC
DE-MODULATOR
PRE-PROCESSING
MAIN IN
MAIN_L
MAIN_R
SC1IL
SC1IR
INPUT SELECT
ADC
PRESCALE
X2101
XIN
XOUT
AV4
AV2
AV1
Y
PB
PR
V
L
R
C
Y-SW
R-SW
Y-G
C-G
AV4C_YSW
AV4C_Y
AV4C_PB
AV4C_PR
AV4_V
AV4_L
AV4_R
AV2C_YSW
AV2C_Y
AV2C_PB
AV2C_PR
AV2_V
AV2_L
AV2_R
AV1_C
AV1_Y
AV1_YSW
AV1_V
AV1_L
AV1_R
MONITOR OUT
JK3100
Q3002
Q2102
Q2103
Q2001
Q2002
L_OUT
R_OUT
IC2105
AUDIO SW
HDMI_L
HDMI_R
TV_L
TV_R
LIN
RIN
AV1_L
AV1_R
AV2_L
AV2_R
AV3_L
AV3_R
AV4_L
AV4_R
L5
R5
L7
R7
L8
R8
L1
R1
L2
R2
L4
R4
L3
R3
HDMI IN
TV IN
AUDIO IN
AV1 IN
AV2 IN
AV3 IN
AV4 IN
MAIN OUT
VCC
LOUT2
ROUT2
MAIN_L
MAIN_R
SCL
SDA
SCL0B
SDA0B
AV1_V
AV1_C
AV1_Y
AV1_YSW
AV2_V
AV2C_Y
AV2C_PB
AV2C_PR
AV2C_YSW
AV3_V
AV3C_Y
AV3C_PB
AV3C_PR
AV3C-YSW
Q3210
AV4_V
AV4_Y
AV4_C
AV4_S
TA
TUNER
TU001
MAIN TUNER
BM
SW1
SW2
AFAGC
S-CLOCK
S-DATA
AFT
SIF
BTL
VIDEO
Q003
Q002
TA5
BT30V
TV_V2
SCL0B
SDA0B
SUB5V
RFAGC1
TA6
AFT1
SIF
TV_V1
H5
H6
BT30V
SUB5V
AFT1
FOR FACTORY USE
H15
AGC1

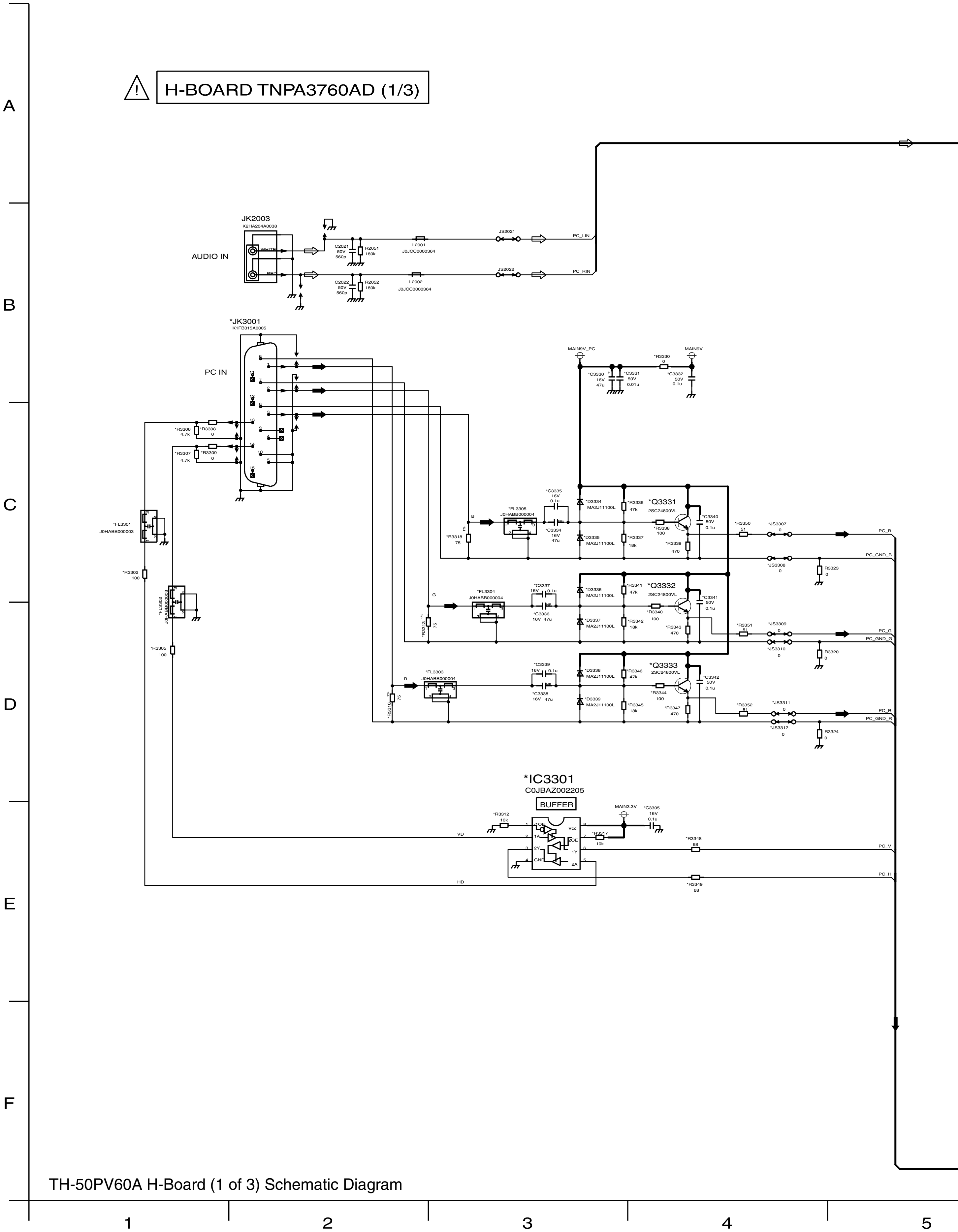
TH-50PV60A H and TA-Board Block Diagram



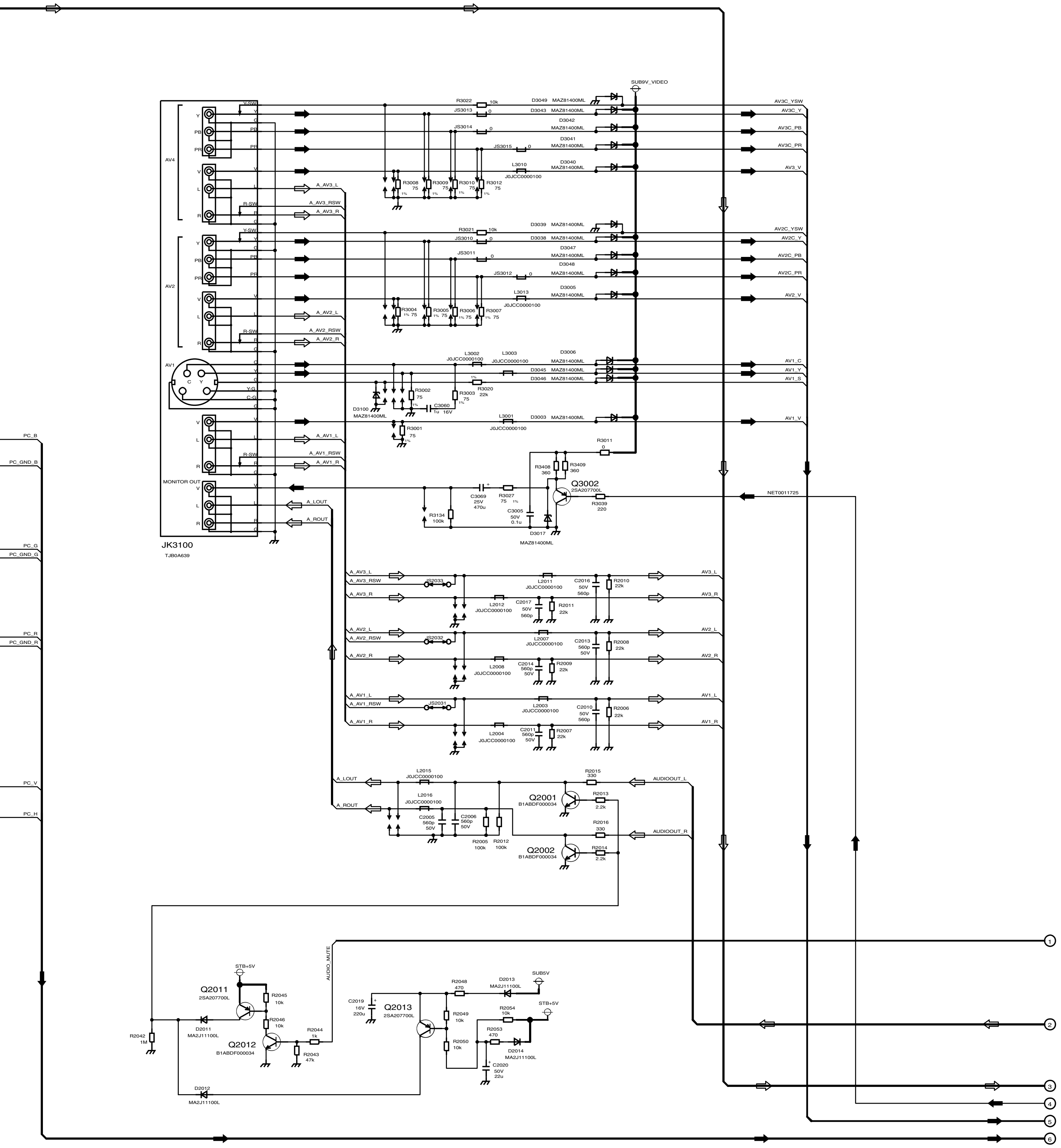
TO PA30
H40
STB 5V
SUB 5V
SUB 5V
SUB 9V
MAIN 9V
SUB 3.3V
MAIN 3.3V
A_MUTE
SUB8V
SUB5V_MSP
BT30V
D3022
D3021
D3023
SUB5V
Q3008
SHORT SOS DET
H1
TO DG1
SOS
MSP_RESET
PC_G
PC_B
PC_R
PC_H
PC_V
SP MUTE
AUDIO MUTE
RESET
SL
SR
SDA0B
SCL0B
SUB 3.3V
STB 3.3V
STB 5V
HDMI_SR
HDMI_SL
MAIN Y/CVBS
MAIN PB
MAIN PR
MAIN_CVBS
SUB_Y
SUB_PB
SUB_PR
Q2114
Q2113
V DET
Q2316
Q2317
STB5V
Q2013
Q2011
Q2012
MUTE SW
Q2315
MUTE CCT
Q2314
Q2302
Q2112
Q2301
Q2300
IC2104
VAO
SUB9V
VCC
L
R
RESET0
SP OUT
DACM L
DACM R
Q2105
Q2104
LOUDSPEAKER SOUND PROCESSING
DAC
PRE-PROCESSING
SOURCE SELECT
HEADPHONE SURROUND SOUND PROCESSING
HP OUT
DACA L
DACA R
MUTE
IN2
IN1
OUT2
OUT1
HP_LOUT
HP_ROUT
IC2109
HP AMP
AUDIO OUT
PRESCALE
OUTPUT SELECT
SC1OL
SC1OR
L_OUT
R_OUT
TV OUT
SC2OL
SC2OR
TV_L
TV_R
IC3005
VIDEO SW
AV1_V
AV1_C
AV1_Y
AV1_YSW
V1
C1
Y1
S-1
AV1 IN
AV2_V
V2
Y2
AV2 IN
AV2C_Y
AV2C_PB
AV2C_PR
AV2C_YSW
CY1
PB1
PR1
S-2
AV2C IN
AV3_V
V4
Y4
AV3 IN
AV3C_Y
AV3C_PB
AV3C_PR
AV3C-YSW
CY2
PB2
PR2
PDD1
AV3C IN
Q3210
V8
TV(S) IN
V7
TV(M) IN
AV4_V
AV4_Y
AV4_C
AV4_S
V3
Y3
C3
S-3
AV4 IN
MONITOR OUT
VOUT4
MAIN OUT
V/YOUT1
C/PBOUT1
PROUT1
VOUT5
Q3014
Q3017
Q3011
Q3015
MAIN_Y
MAIN_PB
MAIN_PR
MAIN_CVBS
SUB OUT
V/YOUT2
PB/COUT2
PROUT2
SUB_Y
SUB_PB
SUB_PR
SDA
SCL
SDA0B
SCL0B
VCC
H2
TO DG2
AFC1
AI_SENSOR
RMCN
G_LED
STBY_LED
KEY1
KEY_EDGE
H51
TO G51
RMIN
MAIN_R
MAIN_L
AV4_S
AV4_C
AV4_Y
AV4_V
AV4_L
AV4_R
STB 5V
SUB 5V

TH-50PV60A H and TA-Board Block Diagram

14.11. H-Board (1 of 3) Schematic Diagram


H-BOARD TNPA3760AD (1/3)
A
B
C
D
E
F
1
2
3
4
5
JK2003
K2HA204A0038
AUDIO IN
WHITE
RED
C2021
50V
560p
R2051
180k
C2022
50V
560p
R2052
180k
L2001
J0JCC0000364
L2002
J0JCC0000364
JS2021
JS2022
PC_LIN
PC_RIN
*JK3001
K1FB315A0005
PC IN
*R3306
4.7k
*R3308
0
*R3307
4.7k
*R3309
0
*FL3301
J0HABB000003
*R3302
100
*FL3302
J0HABB000003
*R3305
100
MAIN9V_PC
MAIN9V
*R3330
0
*C3330
16V
47u
*C3331
50V
0.01u
*C3332
50V
0.1u
B
*FL3305
J0HABB000004
*R3318
75
*C3335
16V
0.1u
*C3334
16V
47u
*D3334
MA2J11100L
*D3335
MA2J11100L
*R3336
47k
*R3337
18k
*Q3331
2SC24800VL
*R3338
100
*R3339
470
*C3340
50V
0.1u
*R3350
51
*JS3307
0
PC_B
*JS3308
0
PC_GND_B
R3323
0
G
*FL3304
J0HABB000004
*R3313
75
*C3337
16V
0.1u
*C3336
16V 47u
*D3336
MA2J11100L
*D3337
MA2J11100L
*R3341
47k
*R3342
18k
*Q3332
2SC24800VL
*R3340
100
*R3343
470
*C3341
50V
0.1u
*R3351
51
*JS3309
0
PC_G
PC_GND_G
*JS3310
0
R3320
0
R
*FL3303
J0HABB000004
*R3310
75
*C3339
16V
0.1u
*C3338
16V 47u
*D3338
MA2J11100L
*D3339
MA2J11100L
*R3346
47k
*R3345
18k
*Q3333
2SC24800VL
*R3344
100
*R3347
470
*C3342
50V
0.1u
*R3352
51
*JS3311
0
PC_R
PC_GND_R
*JS3312
0
R3324
0
*IC3301
C0JBAZ002205
BUFFER
*R3312
10k
MAIN3.3V
*C3305
16V
0.1u
1OE
1A
2Y
GND
Vcc
2OE
1Y
2A
*R3317
10k
*R3348
68
*R3349
68
VD
HD
PC_V
PC_H

TH-50PV60A H-Board (1 of 3) Schematic Diagram

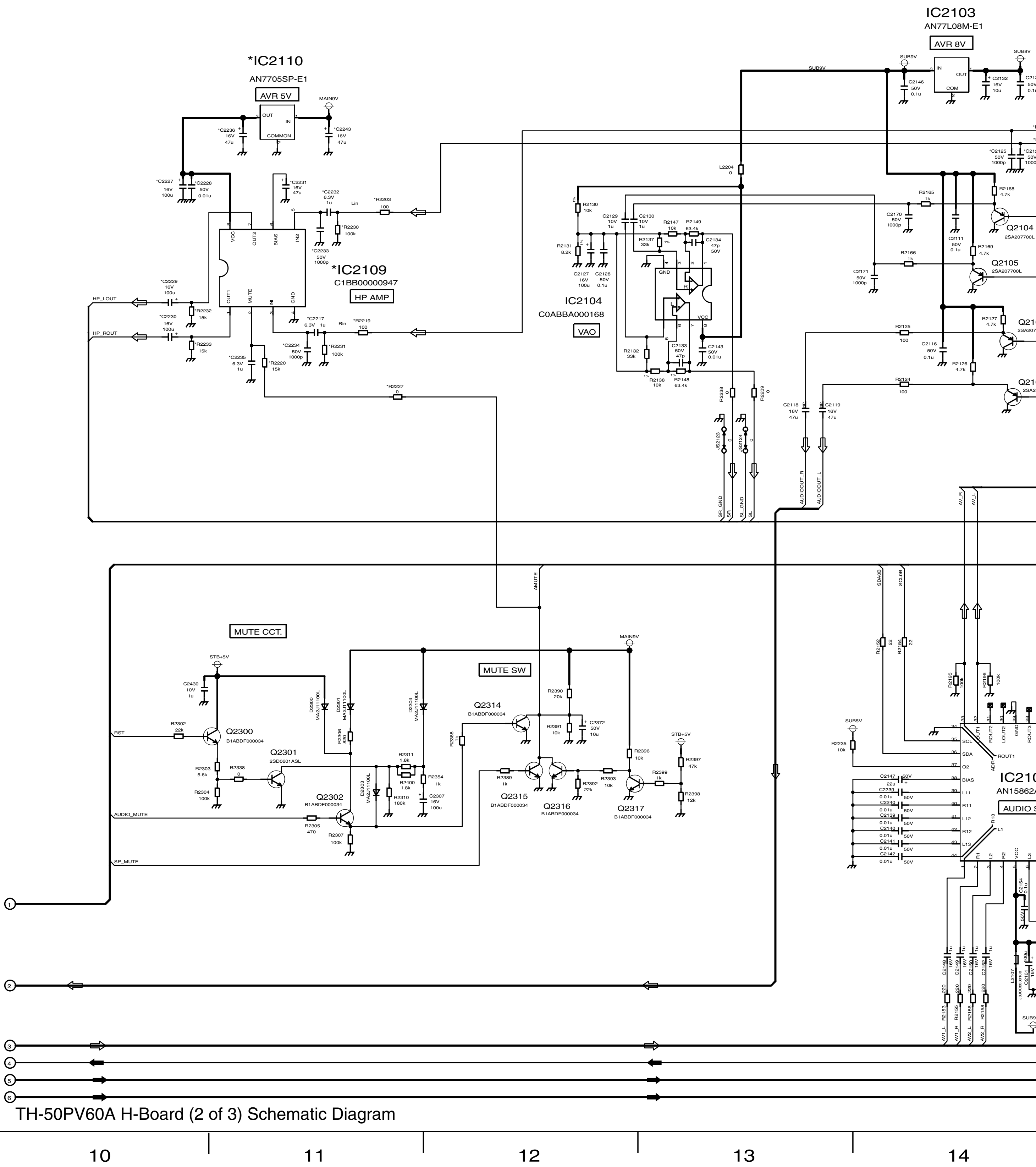

SUB9V_VIDEO
AV4
Y
PB
PR
V
L
R
Y-SW
R-SW
A_AV3_L
A_AV3_RSW
A_AV3_R
AV2
A_AV2_L
A_AV2_RSW
A_AV2_R
AV1
C
Y
Y-G
C-G
A_AV1_L
A_AV1_RSW
A_AV1_R
MONITOR OUT
A_LOUT
A_ROUT
JK3100
TJB0A639
R3022 10k
JS3013 0
JS3014 0
JS3015 0
L3010 J0JCC0000100
D3049 MAZ81400ML
D3043 MAZ81400ML
D3042 MAZ81400ML
D3041 MAZ81400ML
D3040 MAZ81400ML
R3008 75
R3009 75
R3010 75
R3012 75
R3021 10k
JS3010 0
JS3011 0
JS3012 0
L3013 J0JCC0000100
D3039 MAZ81400ML
D3038 MAZ81400ML
D3047 MAZ81400ML
D3048 MAZ81400ML
D3005 MAZ81400ML
R3004 75
R3005 75
R3006 75
R3007 75
L3002 J0JCC0000100
L3003 J0JCC0000100
D3006 MAZ81400ML
D3045 MAZ81400ML
D3046 MAZ81400ML
D3100 MAZ81400ML
R3002 75
R3003 75
R3020 22k
C3060 1u 16V
L3001 J0JCC0000100
D3003 MAZ81400ML
R3001 75
R3011 0
R3408 360
R3409 360
Q3002
2SA207700L
C3069 25V 470u
R3027 75
C3005 50V 0.1u
R3134 100k
D3017 MAZ81400ML
R3039 220
NET0011725
AV3C_YSW
AV3C_Y
AV3C_PB
AV3C_PR
AV3_V
AV2C_YSW
AV2C_Y
AV2C_PB
AV2C_PR
AV2_V
AV1_C
AV1_Y
AV1_S
AV1_V
PC_B
PC_GND_B
PC_G
PC_GND_G
PC_R
PC_GND_R
PC_V
PC_H
JS2033
L2011 J0JCC0000100
C2016 50V 560p
R2010 22k
L2012 J0JCC0000100
C2017 50V 560p
R2011 22k
JS2032
L2007 J0JCC0000100
C2013 560p 50V
R2008 22k
L2008 J0JCC0000100
C2014 560p 50V
R2009 22k
JS2031
L2003 J0JCC0000100
C2010 50V 560p
R2006 22k
L2004 J0JCC0000100
C2011 560p 50V
R2007 22k
AV3_L
AV3_R
AV2_L
AV2_R
AV1_L
AV1_R
L2015 J0JCC0000100
L2016 J0JCC0000100
C2005 560p 50V
C2006 560p 50V
R2005 100k
R2012 100k
R2015 330
R2013 2.2k
Q2001 B1ABDF000034
R2016 330
R2014 2.2k
Q2002 B1ABDF000034
AUDIOOUT_L
AUDIOOUT_R
AUDIO_MUTE
STB+5V
Q2011 2SA207700L
R2045 10k
R2046 10k
D2011 MA2J11100L
R2042 1M
Q2012 B1ABDF000034
R2044 1k
R2043 47k
D2012 MA2J11100L
C2019 16V 220u
Q2013 2SA207700L
R2048 470
D2013 MA2J11100L
SUB5V
R2049 10k
R2054 10k
STB+5V
R2053 470
R2050 10k
D2014 MA2J11100L
C2020 50V 22u
1
2
3
4
5
6

TH-50PV60A H-Board (1 of 3) Schematic Diagram

5 6 7 8 9

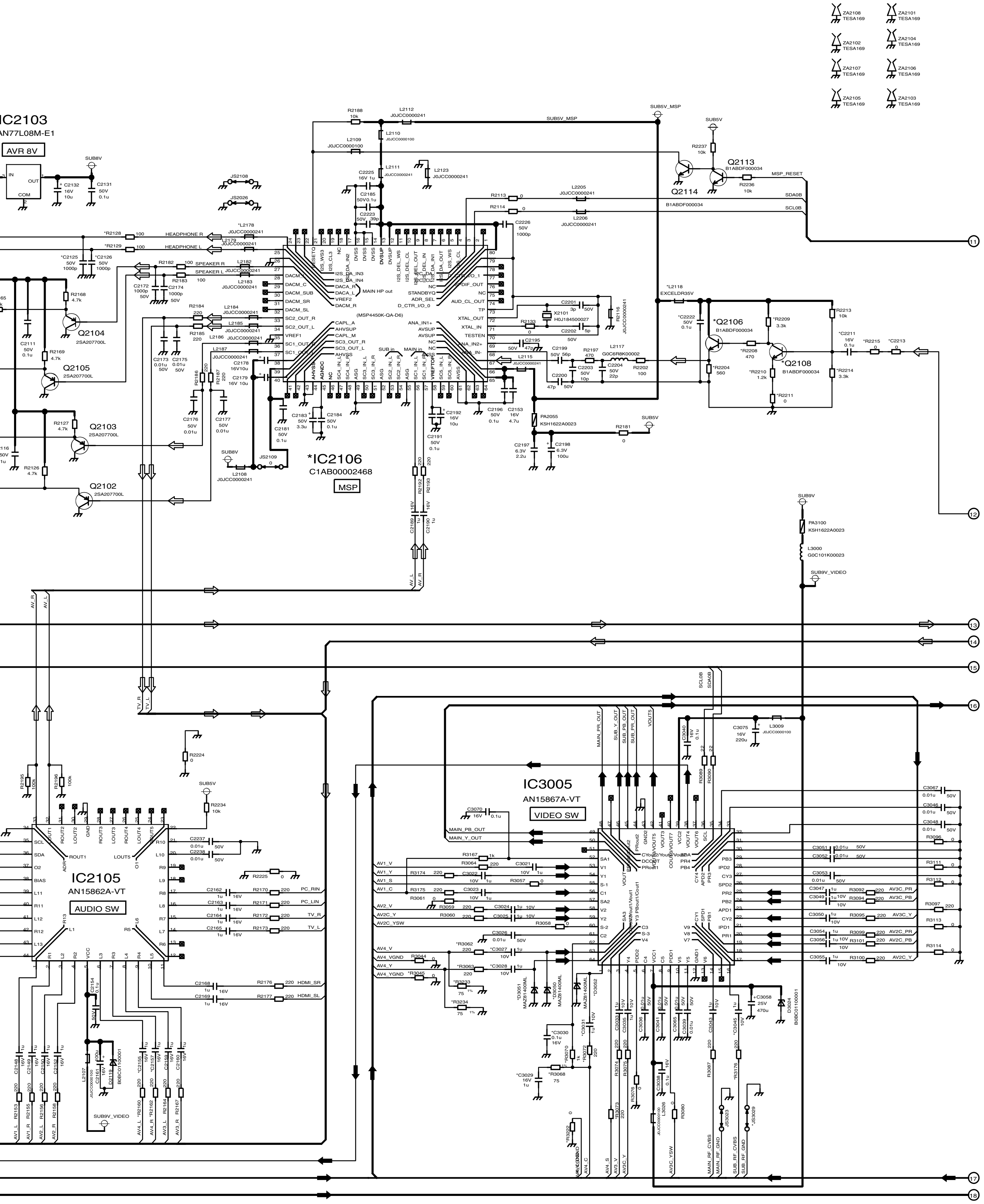
14.12. H-Board (2 of 3) Schematic Diagram

⚠ H-BOARD TNPA3760AD (2/3)



*IC2110
AN7705SP-E1
AVR 5V
MAIN9V
IC2103
AN77L08M-E1
AVR 8V
SUB9V
SUB8V
*IC2109
C1BB00000947
HP AMP
IC2104
C0ABBA000168
VAO
HP_LOUT
HP_ROUT
Lin
Rin
VCC
OUT2
BIAS
IN2
OUT1
MUTE
IN1
GND
L2204
R2130
R2131
C2129
C2130
R2147
R2149
R2137
C2134
C2127
C2128
R2132
C2133
C2143
R2138
R2148
R2238
R2239
JS2123
JS2124
SR_GND
SR
SL_GND
SL
AUDIOOUT_R
AUDIOOUT_L
C2118
C2119
R2165
R2168
Q2104
2SA207700L
R2169
C2170
C2111
R2166
Q2105
2SA207700L
C2171
R2127
R2125
C2116
R2126
R2124
C2146
C2132
C2125
AV_R
AV_L
AMUTE
*R2227
*R2203
*R2230
*C2232
*C2231
*C2233
*C2227
*C2228
*C2229
*C2230
*R2232
*R2233
*C2235
*R2220
*C2217
*R2219
*C2234
*R2231
*C2236
*C2243
MUTE CCT.
STB+5V
C2430
RST
R2302
Q2300
B1ABDF000034
R2303
R2338
Q2301
2SD0601ASL
R2304
AUDIO_MUTE
R2305
Q2302
B1ABDF000034
R2307
SP_MUTE
D2300
MA2J11100L
D2301
MA2J11100L
R2306
D2304
MA2J11100L
R2311
R2400
D2303
MA2J11100L
R2310
R2354
C2307
MUTE SW
Q2314
B1ABDF000034
R2388
R2389
Q2315
B1ABDF000034
Q2316
B1ABDF000034
R2390
R2391
C2372
R2392
R2393
MAIN9V
R2396
R2399
Q2317
B1ABDF000034
STB+5V
R2397
R2398
SDA08
SCL08
R2152
R2154
R2195
R2196
SUB5V
R2235
SCL
SDA
O2
BIAS
L11
R11
L12
R12
L13
ROUT1
IC210
AN15862
AUDIO S
C2147
C2239
C2240
C2139
C2140
C2141
C2142
C2148
C2149
C2150
C2152
C2154
C2161
L2107
R2153
R2155
R2156
R2158
AV1_L
AV1_R
AV2_L
AV2_R
SUB9
①
②
③
④
⑤
⑥
10
11
12
13
14

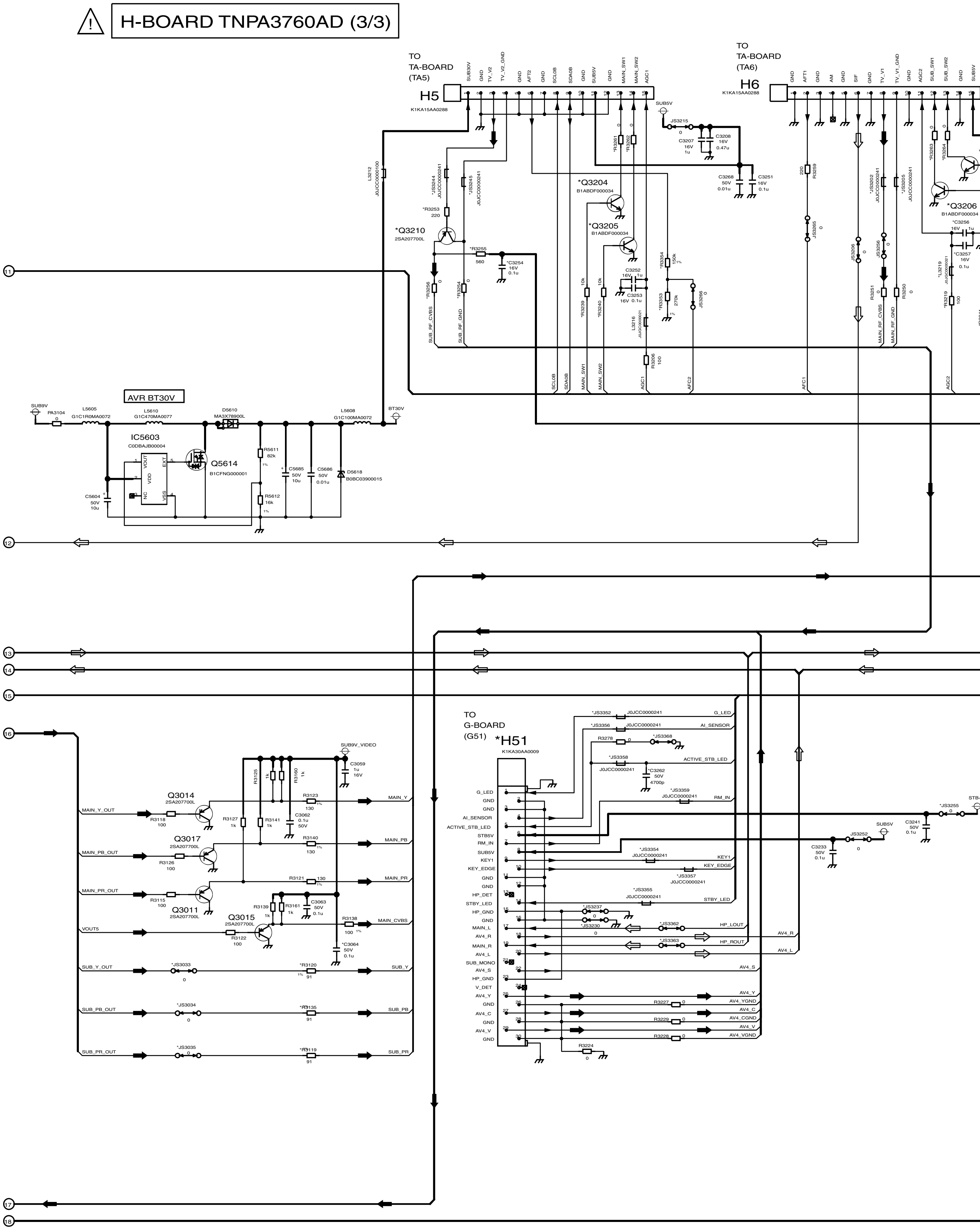
TH-50PV60A H-Board (2 of 3) Schematic Diagram


IC2103
AN77L08M-E1
AVR 8V
SUB8V
*IC2106
C1AB00002468
MSP
(MSP4450K-QA-D6)
Q2104
2SA207700L
Q2105
2SA207700L
Q2103
2SA207700L
Q2102
2SA207700L
Q2113
B1ABDF000034
Q2114
B1ABDF000034
*Q2106
B1ABDF000034
*Q2108
B1ABDF000034
SUB5V_MSP
SUB5V
MSP_RESET
SDA0B
SCL0B
HEADPHONE R
HEADPHONE L
SPEAKER R
SPEAKER L
SUB9V
SUB9V_VIDEO
AV_L
AV_R
TV_R
TV_L
IC2105
AN15862A-VT
AUDIO SW
IC3005
AN15867A-VT
VIDEO SW
MAIN_PB_OUT
MAIN_Y_OUT
MAIN_PR_OUT
SUB_Y_OUT
SUB_PB_OUT
SUB_PR_OUT
VOUT5
PC_RIN
PC_LIN
TV_R
TV_L
HDMI_SR
HDMI_SL
AV1_V
AV1_Y
AV1_S
AV1_C
AV2_V
AV2C_Y
AV2C_YSW
AV4_V
AV4_VGND
AV4_Y
AV4_YGND
AV3C_PR
AV3C_PB
AV3C_Y
AV2C_PR
AV2C_PB
AV2C_Y
MAIN_RF_CVBS
MAIN_RF_GND
SUB_RF_CVBS
SUB_RF_GND
ZA2101 TESA169
ZA2102 TESA169
ZA2103 TESA169
ZA2104 TESA169
ZA2105 TESA169
ZA2106 TESA169
ZA2107 TESA169
ZA2108 TESA169
11
12
13
14
15
16
17
18

TH-50PV60A H-Board (2 of 3) Schematic Diagram

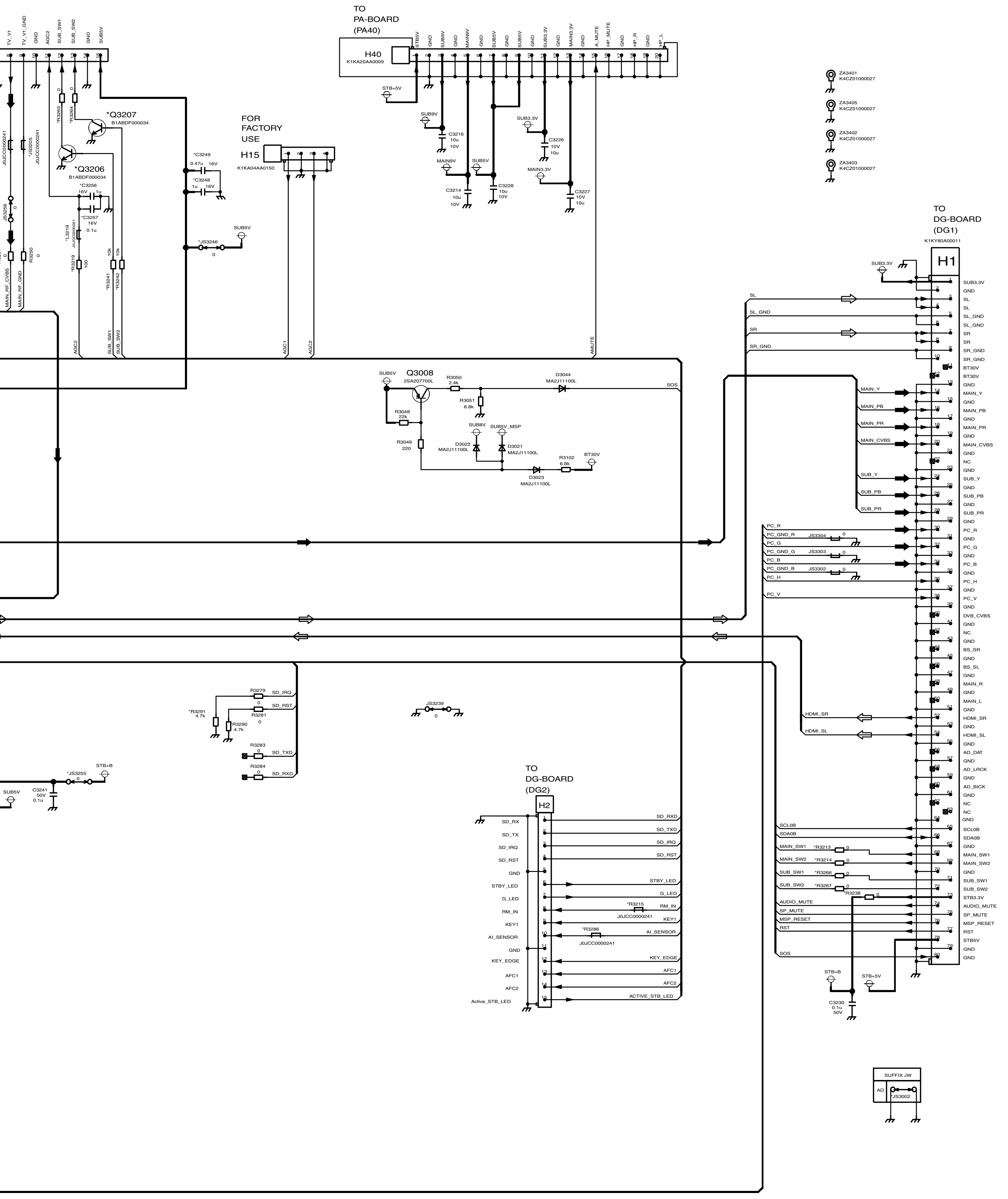
14	15	16	17	18

14.13. H-Board (3 of 3) Schematic Diagram


H-BOARD TNPA3760AD (3/3)
TO TA-BOARD (TA5)
H5
K1KA15AA0288
SUB30V
GND
TV_V2
TV_V2_GND
AFT2
SCL0B
SDA0B
SUB5V
MAIN_SW1
MAIN_SW2
AGC1
TO TA-BOARD (TA6)
H6
AFT1
AM
SIF
TV_V1
TV_V1_GND
AGC2
SUB_SW1
SUB_SW2
*Q3210
2SA207700L
*Q3204
B1ABDF000034
*Q3205
B1ABDF000034
*Q3206
B1ABDF000034
L3212
J0JCC0000100
SUB_RF_CVBS
SUB_RF_GND
MAIN_RF_CVBS
MAIN_RF_GND
AFC1
AFC2
AVR BT30V
SUB9V
PA3104
L5605
G1C1R0MA0072
L5610
G1C470MA0077
D5610
MA3X78900L
L5608
G1C100MA0072
BT30V
IC5603
C0DBAJB00004
Q5614
B1CFNG000001
D5618
B0BC03900015
C5604
50V
10u
C5685
50V
10u
C5686
50V
0.01u
R5611
82k
R5612
16k
Q3014
2SA207700L
Q3017
2SA207700L
Q3011
2SA207700L
Q3015
2SA207700L
SUB9V_VIDEO
MAIN_Y_OUT
MAIN_PB_OUT
MAIN_PR_OUT
VOUT5
SUB_Y_OUT
SUB_PB_OUT
SUB_PR_OUT
MAIN_Y
MAIN_PB
MAIN_PR
MAIN_CVBS
SUB_Y
SUB_PB
SUB_PR
TO G-BOARD (G51)
*H51
K1KA30AA0009
G_LED
GND
AI_SENSOR
ACTIVE_STB_LED
STB5V
RM_IN
SUB5V
KEY1
KEY_EDGE
HP_DET
STBY_LED
HP_GND
MAIN_L
AV4_R
MAIN_R
AV4_L
SUB_MONO
AV4_S
V_DET
AV4_Y
AV4_C
AV4_V
HP_LOUT
HP_ROUT
AV4_YGND
AV4_CGND
AV4_VGND
11
12
13
14
15
16
17
18

TH-50PV60A H-Board (3 of 3) Schematic Diagram

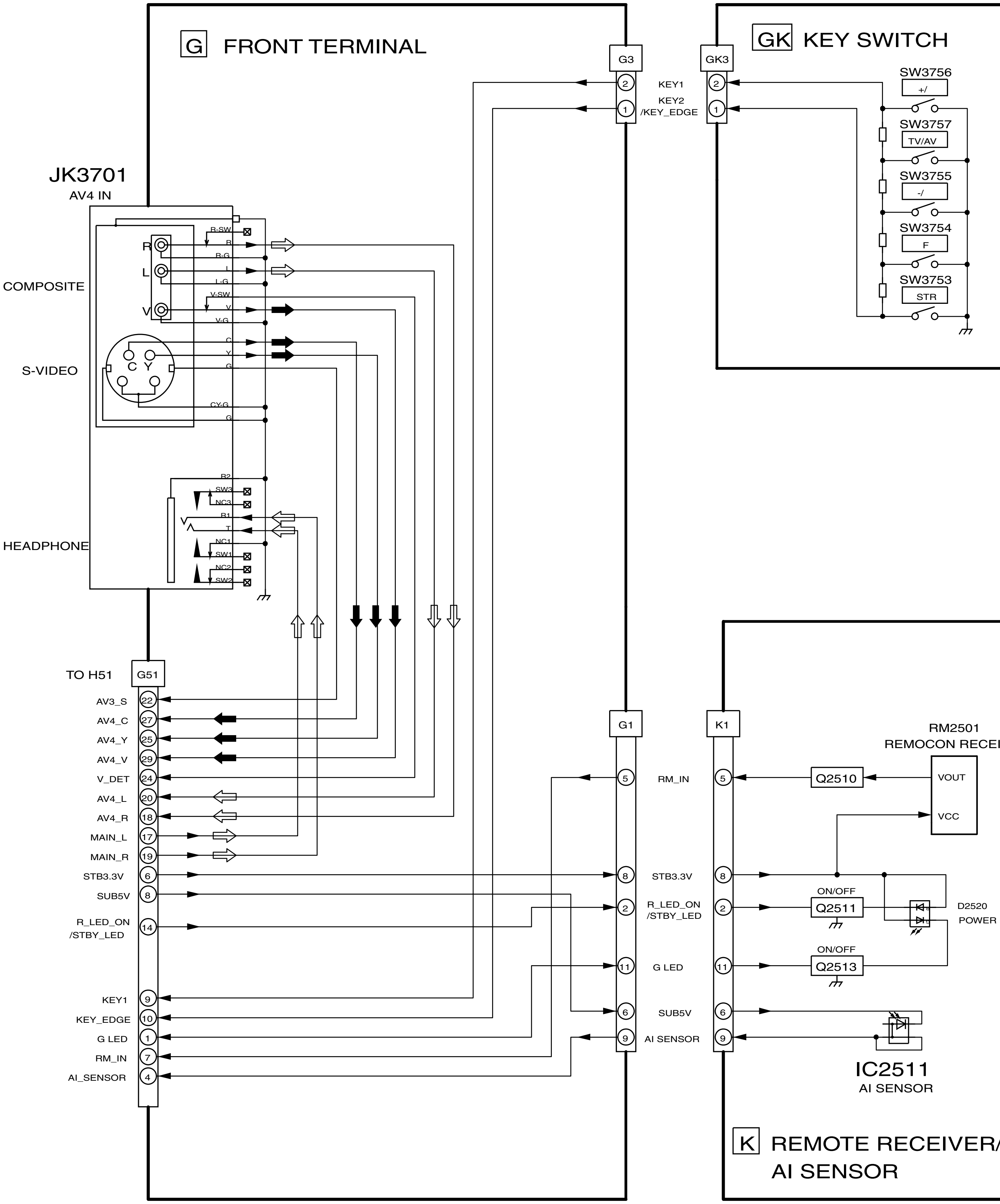
19 20 21 22 23


TO
PA-BOARD
(PA40)
H40
K1KA20AA0009
STB5V
GND
SUB9V
GND
MAIN9V
GND
SUB5V
GND
SUB5V
GND
SUB3.3V
GND
MAIN3.3V
GND
A_MUTE
HP_MUTE
GND
HP_R
GND
HP_L
STB+5V
SUB9V
C3216 10u 10V
MAIN9V
SUB5V
C3214 10u 10V
C3228 10u 10V
SUB3.3V
C3226 10V 10u
MAIN3.3V
C3227 10V 10u
FOR
FACTORY
USE
H15
K1KA04AA0150
*C3249 0.47u 16V
*C3248 1u 16V
*JS3246 0
SUB5V
TV_V1
TV_V1_GND
GND
AGC2
SUB_SW1
SUB_SW2
GND
SUB5V
*Q3207
B1ABDF000034
*Q3206
B1ABDF000034
*R3263
*R3264
*C3256 16V 1u
*C3257 16V 0.1u
*L3219
*R3219 100
*R3241 10k
*R3242 10k
R3250 0
JS3256
MAIN_RF_CVBS
MAIN_RF_GND
AGC2
SUB_SW1
SUB_SW2
AGC1
AGC2
A.MUTE
ZA3401 K4CZ01000027
ZA3405 K4CZ01000027
ZA3402 K4CZ01000027
ZA3403 K4CZ01000027
TO
DG-BOARD
(DG1)
K1KY80A00011
H1
SUB3.3V
SUB3.3V
GND
SL
SL
SL_GND
SL_GND
SR
SR
SR_GND
SR_GND
BT30V
BT30V
GND
MAIN_Y
GND
MAIN_PB
GND
MAIN_PR
GND
MAIN_CVBS
GND
NC
GND
SUB_Y
GND
SUB_PB
GND
SUB_PR
GND
PC_R
GND
PC_G
GND
PC_B
GND
PC_H
GND
PC_V
GND
DVB_CVBS
GND
NC
GND
BS_SR
GND
BS_SL
GND
MAIN_R
GND
MAIN_L
GND
HDMI_SR
GND
HDMI_SL
GND
AD_DAT
GND
AD_LRCK
GND
AD_BICK
GND
NC
NC
GND
SCL0B
SDA0B
GND
MAIN_SW1
MAIN_SW2
GND
SUB_SW1
SUB_SW2
STB3.3V
AUDIO_MUTE
SP_MUTE
MSP_RESET
RST
STB5V
GND
GND
SUB5V
Q3008
2SA2077O0L
R3050 2.4k
D3044 MA2J11100L
SOS
R3051 6.8k
R3048 22k
R3049 220
SUB8V
SUB5V_MSP
D3022 MA2J11100L
D3021 MA2J11100L
R3102 6.8k
BT30V
D3023 MA2J11100L
PC_R
PC_GND_R
PC_G
PC_GND_G
PC_B
PC_GND_B
PC_H
PC_V
JS3304 0
JS3303 0
JS3302 0
HDMI_SR
HDMI_SL
SCL0B
SDA0B
MAIN_SW1
MAIN_SW2
SUB_SW1
SUB_SW2
*R3213 0
*R3214 0
*R3266 0
*R3267 0
*R3238 0
AUDIO_MUTE
SP_MUTE
MSP_RESET
RST
SOS
STB+B
STB+5V
C3230 0.1u 50V
R3279 0
SD_IRQ
SD_RST
*R3291 4.7k
R3281 0
R3290 4.7k
R3283 0
SD_TXD
R3284 0
SD_RXD
JS3239 0
*JS3255 0
STB+B
SUB5V
C3241 50V 0.1u
TO
DG-BOARD
(DG2)
H2
SD_RX
SD_TX
SD_IRQ
SD_RST
GND
STBY_LED
G_LED
RM_IN
KEY1
AI_SENSOR
GND
KEY_EDGE
AFC1
AFC2
Active_STB_LED
SD_RXD
SD_TXD
SD_IRQ
SD_RST
STBY_LED
G_LED
*R3215
RM_IN
J0JCC0000241
KEY1
*R3286
AI_SENSOR
J0JCC0000241
KEY_EDGE
AFC1
AFC2
ACTIVE_STB_LED
SUFFIX JW
AD
*JS3002

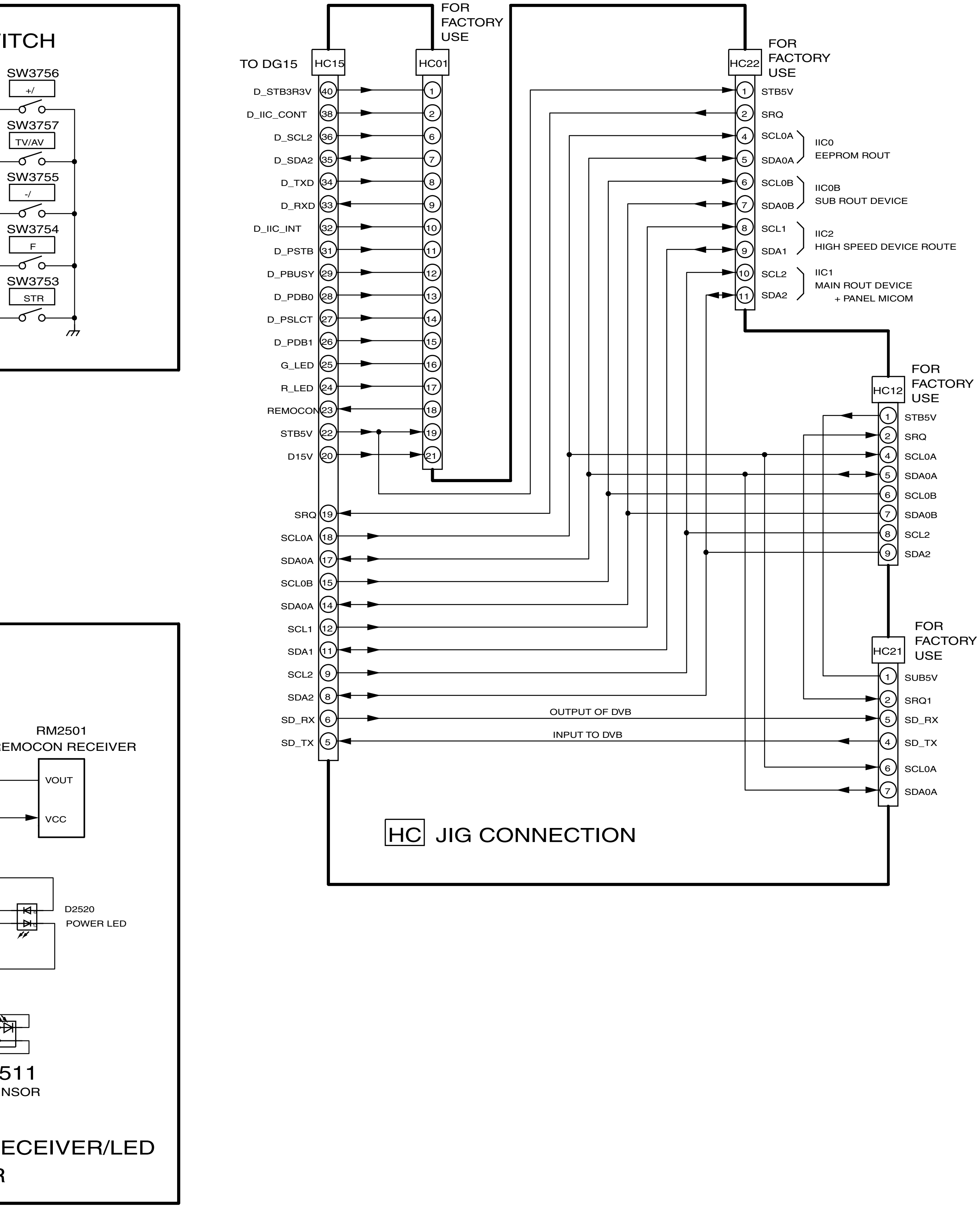
TH-50PV60A H-Board (3 of 3) Schematic Diagram

23 24 25 26 27

14.14. G, GK, HC and K-Board Block Diagram

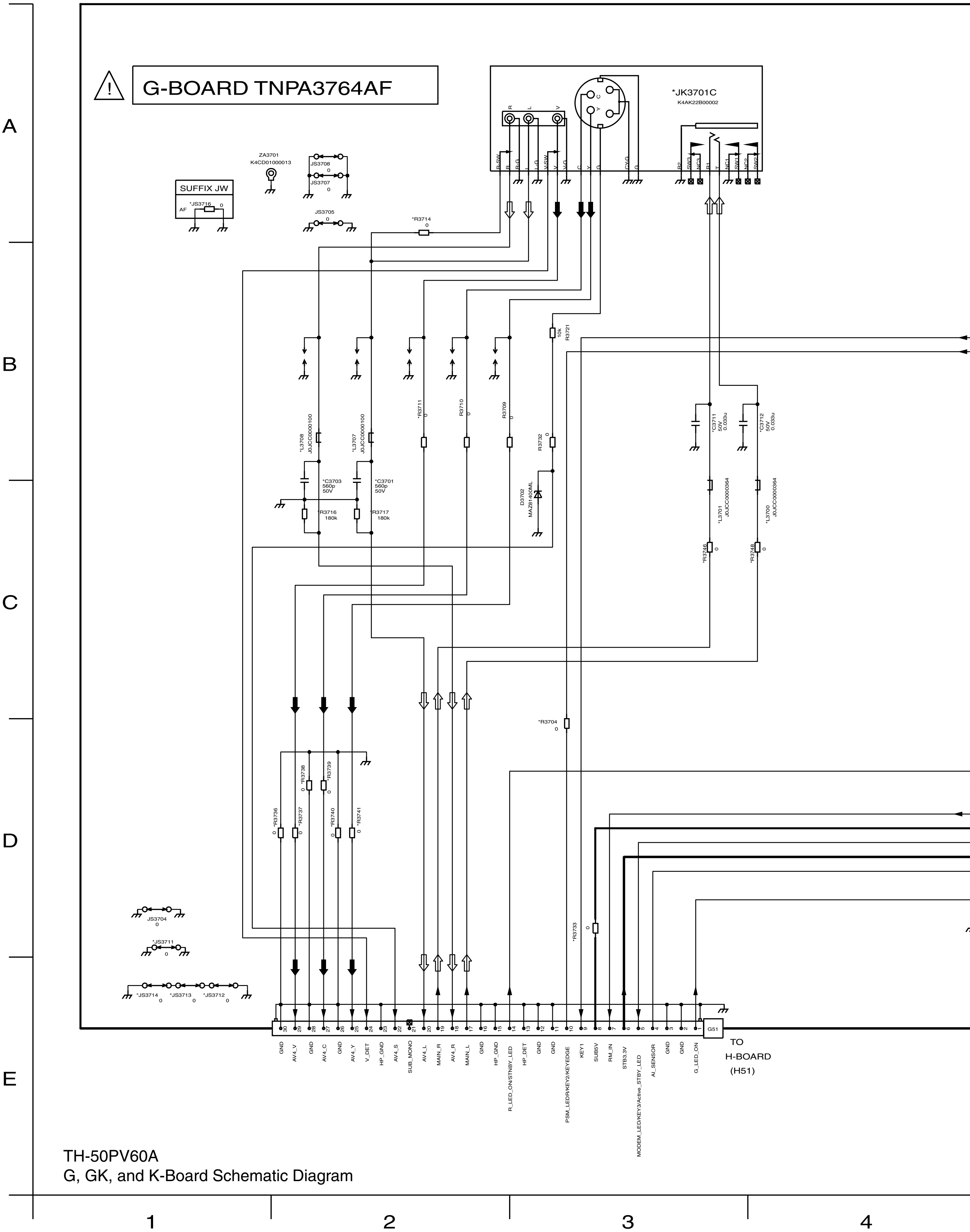

G FRONT TERMINAL
GK KEY SWITCH
G3
GK3
KEY1
KEY2
/KEY_EDGE
SW3756
+/
SW3757
TV/AV
SW3755
-/
SW3754
F
SW3753
STR
JK3701
AV4 IN
COMPOSITE
S-VIDEO
HEADPHONE
R
L
V
C Y
R-SW
R
R-G
L
L-G
V-SW
V
V-G
C
Y
G
CY-G
G
R2
SW3
NC3
R1
T
NC1
SW1
NC2
SW2
TO H51
G51
AV3_S
AV4_C
AV4_Y
AV4_V
V_DET
AV4_L
AV4_R
MAIN_L
MAIN_R
STB3.3V
SUB5V
R_LED_ON
/STBY_LED
KEY1
KEY_EDGE
G LED
RM_IN
AI_SENSOR
22
27
25
29
24
20
18
17
19
6
8
14
9
10
1
7
4
G1
K1
RM_IN
STB3.3V
R_LED_ON
/STBY_LED
G LED
SUB5V
AI SENSOR
5
8
2
11
6
9
RM2501
REMOCON RECEI
VOUT
VCC
Q2510
ON/OFF
Q2511
ON/OFF
Q2513
D2520
POWER
IC2511
AI SENSOR
K REMOTE RECEIVER/
AI SENSOR

TH-50PV60A
G, GK, K, and HC-Board Block Diagram

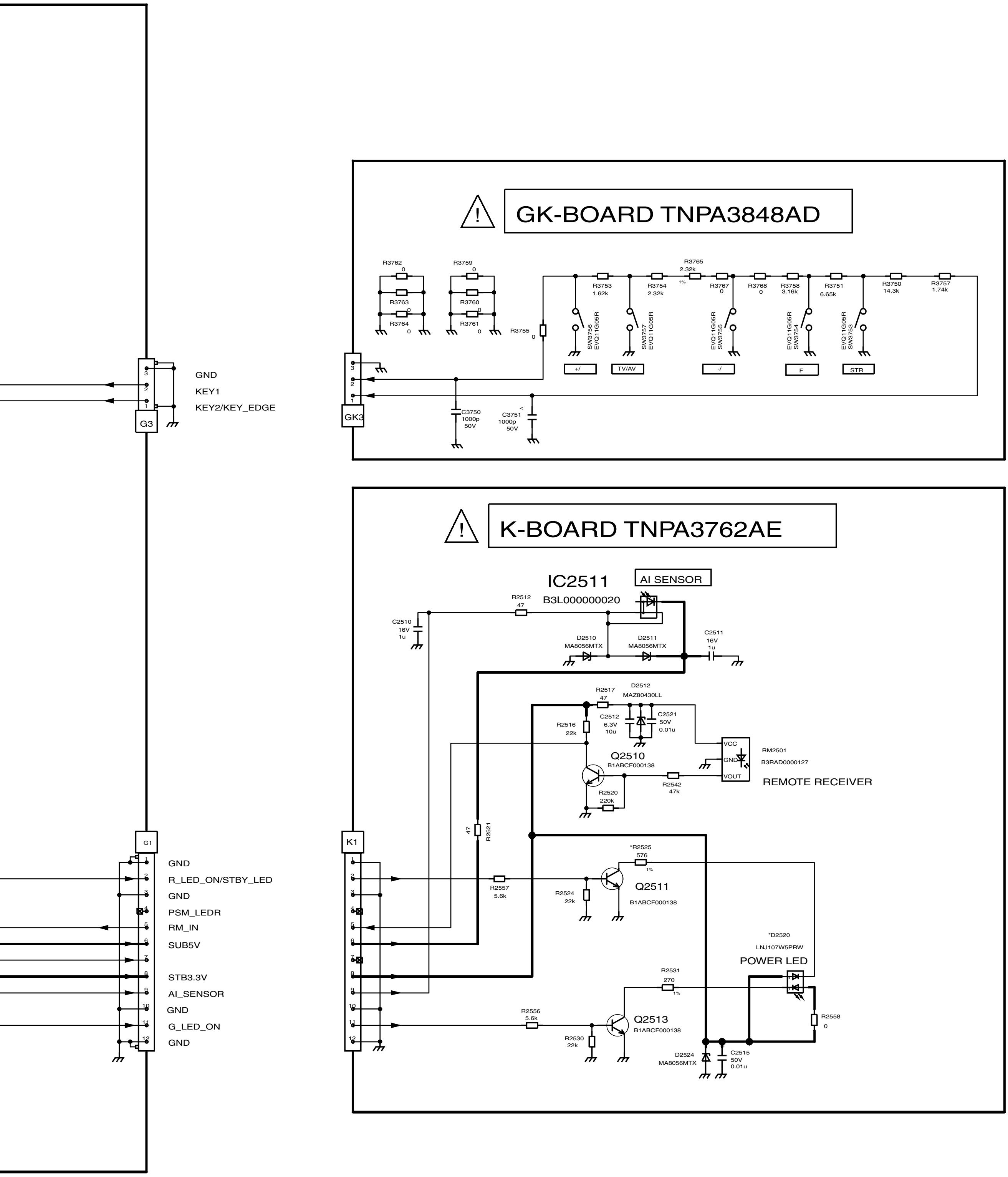

ITCH
SW3756
+/
SW3757
TV/AV
SW3755
-/
SW3754
F
SW3753
STR
RM2501
EMOCON RECEIVER
VOUT
VCC
D2520
POWER LED
511
NSOR
ECEIVER/LED
R
TO DG15
HC15
HC01
FOR FACTORY USE
HC22
FOR FACTORY USE
HC12
FOR FACTORY USE
HC21
FOR FACTORY USE
D_STB3R3V 40 → 1
D_IIC_CONT 38 → 2
D_SCL2 36 → 6
D_SDA2 35 ↔ 7
D_TXD 34 → 8
D_RXD 33 ← 9
D_IIC_INT 32 → 10
D_PSTB 31 → 11
D_PBUSY 29 → 12
D_PDB0 28 → 13
D_PSLCT 27 → 14
D_PDB1 26 → 15
G_LED 25 → 16
R_LED 24 → 17
REMOCON 23 ← 18
STB5V 22 → 19
D15V 20 → 21
SRQ 19
SCL0A 18
SDA0A 17
SCL0B 15
SDA0A 14
SCL1 12
SDA1 11
SCL2 9
SDA2 8
SD_RX 6
SD_TX 5
1 STB5V
2 SRQ
4 SCL0A
5 SDA0A
6 SCL0B
7 SDA0B
8 SCL1
9 SDA1
10 SCL2
11 SDA2
IIC0
EEPROM ROUT
IIC0B
SUB ROUT DEVICE
IIC2
HIGH SPEED DEVICE ROUTE
IIC1
MAIN ROUT DEVICE
+ PANEL MICOM
1 STB5V
2 SRQ
4 SCL0A
5 SDA0A
6 SCL0B
7 SDA0B
8 SCL2
9 SDA2
1 SUB5V
2 SRQ1
5 SD_RX
4 SD_TX
6 SCL0A
7 SDA0A
OUTPUT OF DVB
INPUT TO DVB
HC JIG CONNECTION

TH-50PV60A
G, GK, K, and HC-Board Block Diagram

14.15. G, GK and K-Board Schematic Diagram


A
B
C
D
E
1
2
3
4
G-BOARD TNPA3764AF
*JK3701C
K4AK22B00002
R
L
V
C
Y
R-SW
R
R-G
L
L-G
V-SW
V
V-G
C
Y
G
C/Y-G
G
B2
SW3
NC3
B1
T
NC1
SW1
NC2
SW2
ZA3701
K4CD01000013
JS3708
0
JS3707
0
JS3705
0
SUFFIX JW
AF
*JS3716
0
*R3714
0
R3721
10k
*R3711
0
R3710
0
R3709
0
R3732
0
*L3708
J0JCC0000100
*L3707
J0JCC0000100
*C3703
560p
50V
*C3701
560p
50V
R3716
180k
*R3717
180k
D3702
MAZ8140OML
*C3711
50V
0.033u
*C3712
50V
0.033u
*L3701
J0JCC0000364
*L3700
J0JCC0000364
*R3746
0
*R3748
0
*R3704
0
*R3738
0
*R3739
0
*R3736
0
*R3737
0
*R3740
0
*R3741
0
*R3733
0
JS3704
0
*JS3711
0
*JS3714
0
*JS3713
0
*JS3712
0
G51
30
29
28
27
26
25
24
23
22
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
GND
AV4_V
GND
AV4_C
GND
AV4_Y
V_DET
HP_GND
AV4_S
SUB_MONO
AV4_L
MAIN_R
AV4_R
MAIN_L
GND
HP_GND
R_LED_ON/STNBY_LED
HP_DET
GND
GND
PSM_LEDR/KEY2/KEYEDGE
KEY1
SUB5V
RM_IN
STB3.3V
MODEM_LED/KEY3/Active_STBY_LED
AI_SENSOR
GND
GND
G_LED_ON
TO
H-BOARD
(H51)

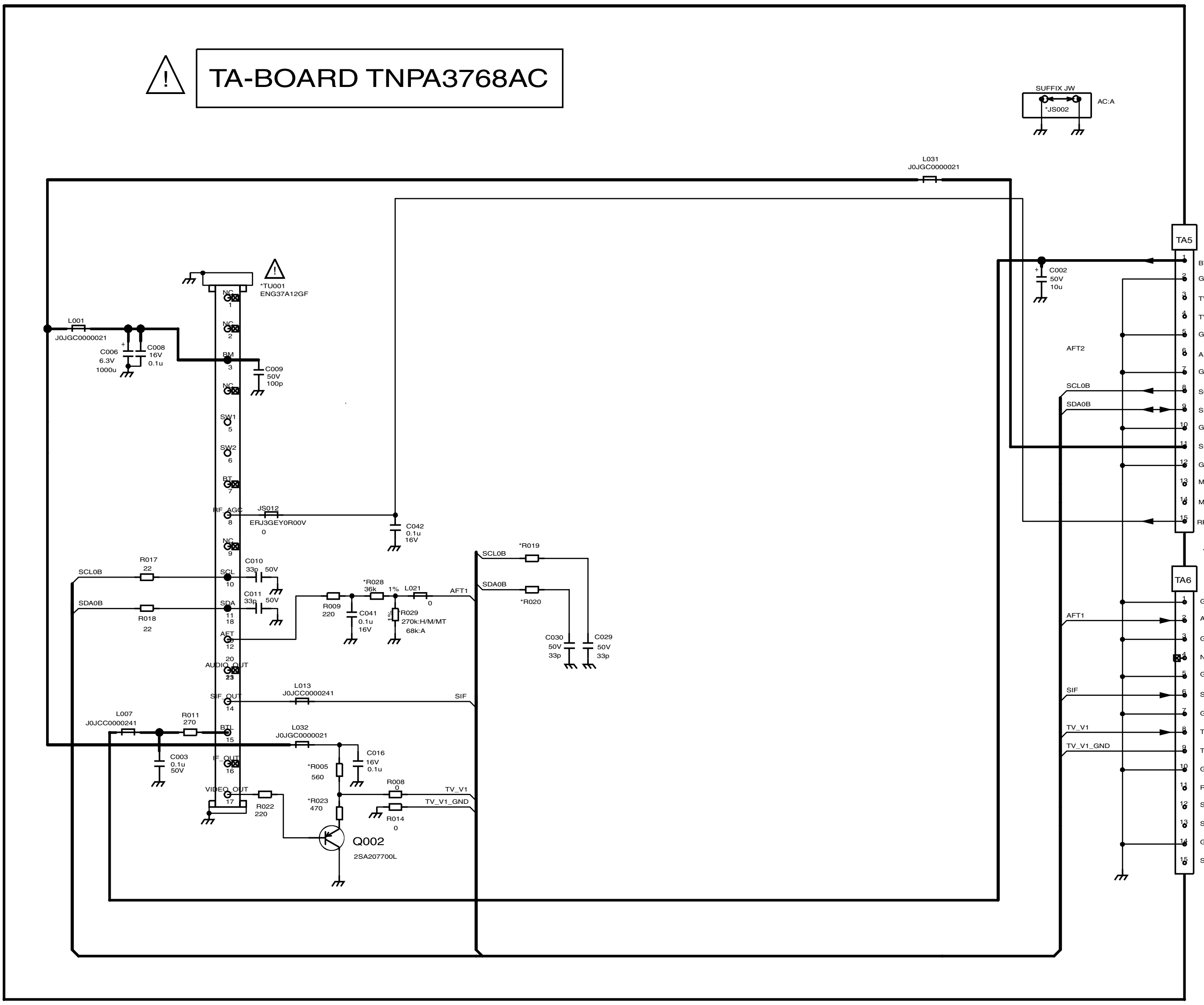
TH-50PV60A
G, GK, and K-Board Schematic Diagram


GK-BOARD TNPA3848AD
R3762 0
R3759 0
R3763 0
R3760 0
R3764 0
R3761 0
R3755 0
R3765 2.32k 1%
R3753 1.62k
R3754 2.32k
R3767 0
R3768 0
R3758 3.16k
R3751 6.65k
R3750 14.3k
R3757 1.74k
SW3756 EVQ11G05R
SW3757 EVQ11G05R
EVQ11G05R SW3755
EVQ11G05R SW3754
EVQ11G05R SW3753
+/
TV/AV
-/
F
STR
C3750 1000p 50V
C3751 1000p 50V
GK3
G3
GND
KEY1
KEY2/KEY_EDGE
K-BOARD TNPA3762AE
IC2511
B3L000000020
AI SENSOR
R2512 47
C2510 16V 1u
D2510 MA8056MTX
D2511 MA8056MTX
C2511 16V 1u
R2517 47
D2512 MAZ80430LL
R2516 22k
C2512 6.3V 10u
C2521 50V 0.01u
Q2510
B1ABCF000138
VCC
GND
VOUT
RM2501
B3RAD0000127
REMOTE RECEIVER
R2542 47k
R2520 220k
R2521 47
K1
G1
*R2525 576 1%
R2557 5.6k
R2524 22k
Q2511
B1ABCF000138
*D2520
LNJ107W5PRW
POWER LED
R2531 270 1%
R2556 5.6k
Q2513
B1ABCF000138
R2530 22k
R2558 0
D2524 MA8056MTX
C2515 50V 0.01u
GND
R_LED_ON/STBY_LED
GND
PSM_LEDR
RM_IN
SUB5V
STB3.3V
AI_SENSOR
GND
G_LED_ON
GND

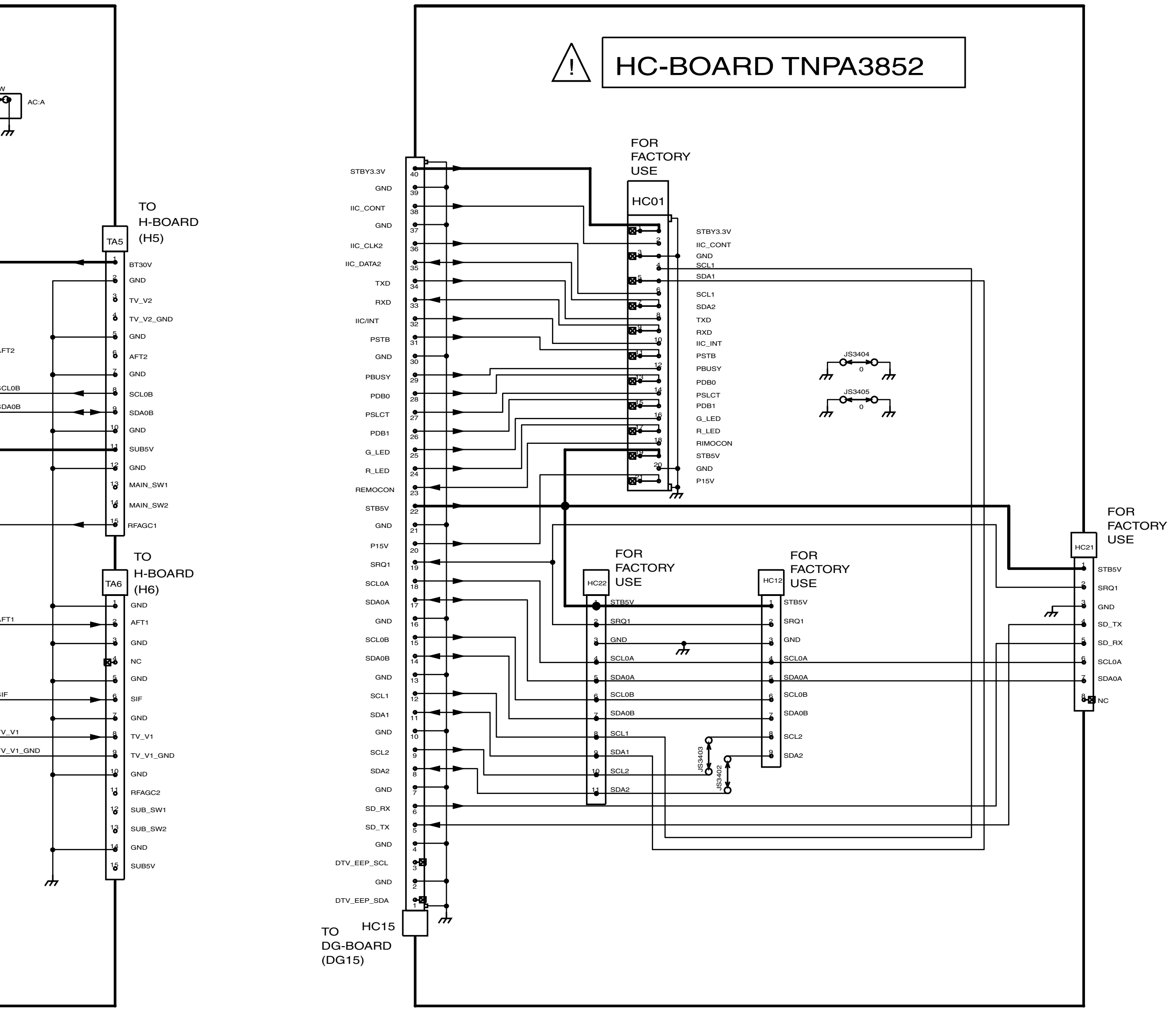
TH-50PV60A
G, GK, and K-Board Schematic Diagram

4 5 6 7 8

14.16. HC and TA-Board Schematic Diagram


A
B
C
D
E
TA-BOARD TNPA3768AC
SUFFIX JW
*JS002
AC:A
L031
J0JGC0000021
TA5
TA6
C002
50V
10u
AFT2
SCL0B
SDA0B
AFT1
SIF
TV_V1
TV_V1_GND
*TU001
ENG37A12GF
NC
BM
SW1
SW2
BT
RF_AGC
SCL
SDA
AFT
AUDIO_OUT
SIF_OUT
BTL
IF_OUT
VIDEO_OUT
L001
J0JGC0000021
C006
6.3V
1000u
C008
16V
0.1u
C009
50V
100p
JS012
ERJ3GEY0R00V
0
C042
0.1u
16V
R017
22
R018
22
C010
33p 50V
C011
33p 50V
R009
220
C041
0.1u
16V
*R028
36k
1%
*R029
270k:H/M/MT
68k:A
L021
0
*R019
*R020
C030
50V
33p
C029
50V
33p
L013
J0JCC0000241
L007
J0JCC0000241
R011
270
C003
0.1u
50V
L032
J0JGC0000021
C016
16V
0.1u
*R005
560
*R023
470
R008
0
R014
0
R022
220
Q002
2SA207700L
1
2
3
4

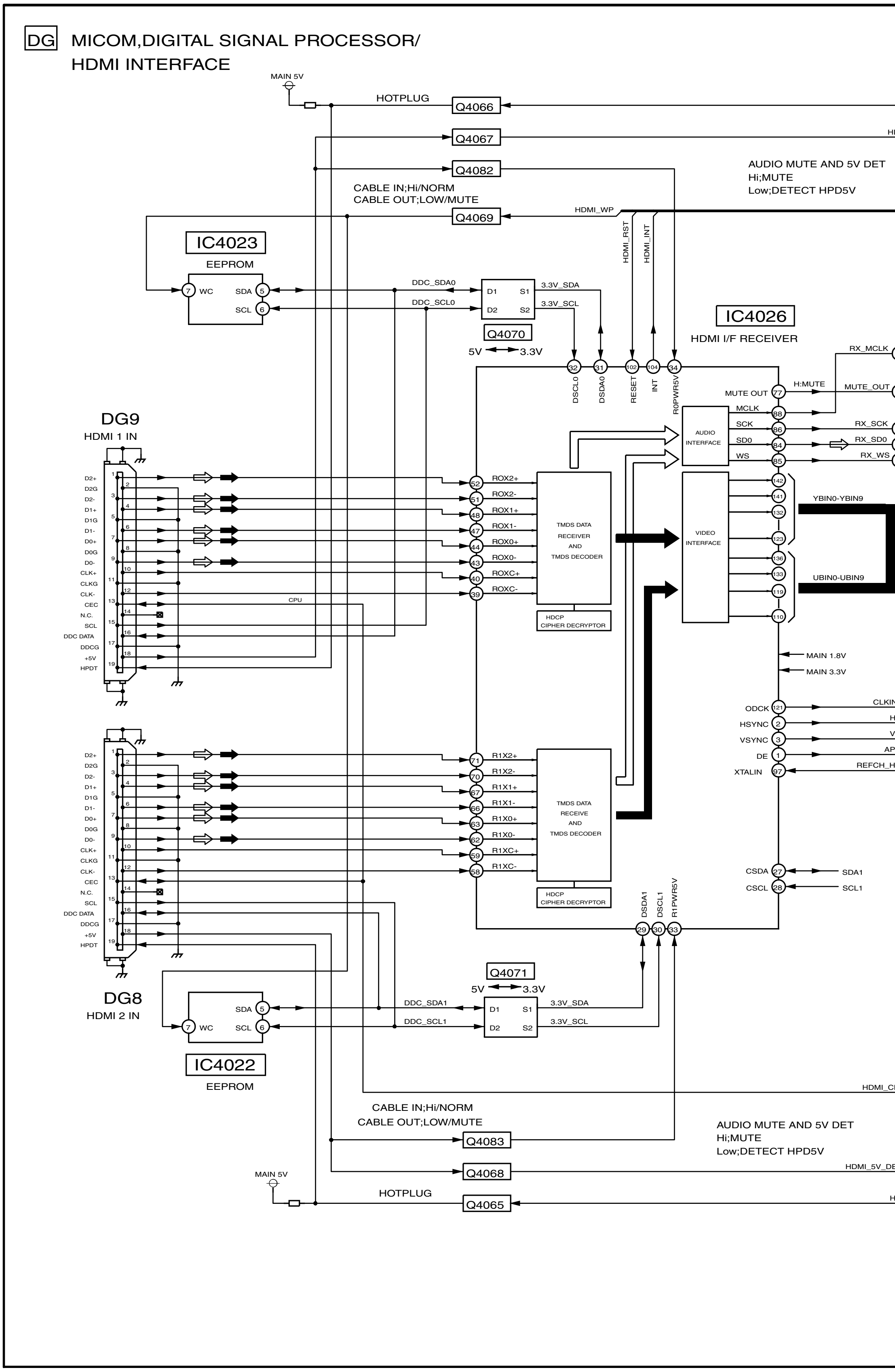
TH-50PV60A
HC and TA-Board Schematic Diagram


HC-BOARD TNPA3852
AC:A
TO H-BOARD (H5)
TA5
BT30V
GND
TV_V2
TV_V2_GND
GND
AFT2
GND
SCL0B
SDA0B
GND
SUB5V
GND
MAIN_SW1
MAIN_SW2
RFAGC1
TO H-BOARD (H6)
TA6
GND
AFT1
GND
NC
GND
SIF
GND
TV_V1
TV_V1_GND
GND
RFAGC2
SUB_SW1
SUB_SW2
GND
SUB5V
STBY3.3V
GND
IIC_CONT
GND
IIC_CLK2
IIC_DATA2
TXD
RXD
IIC/INT
PSTB
GND
PBUSY
PDB0
PSLCT
PDB1
G_LED
R_LED
REMOCON
STB5V
GND
P15V
SRQ1
SCL0A
SDA0A
GND
SCL0B
SDA0B
GND
SCL1
SDA1
GND
SCL2
SDA2
GND
SD_RX
SD_TX
GND
DTV_EEP_SCL
GND
DTV_EEP_SDA
HC15
TO DG-BOARD (DG15)
FOR FACTORY USE
HC01
STBY3.3V
IIC_CONT
GND
SCL1
SDA1
SCL1
SDA2
TXD
RXD
IIC_INT
PSTB
PBUSY
PDB0
PSLCT
PDB1
G_LED
R_LED
RIMOCON
STB5V
GND
P15V
JS3404
0
JS3405
0
FOR FACTORY USE
HC22
STB5V
SRQ1
GND
SCL0A
SDA0A
SCL0B
SDA0B
SCL1
SDA1
SCL2
SDA2
JS3403
JS3402
FOR FACTORY USE
HC12
STB5V
SRQ1
GND
SCL0A
SDA0A
SCL0B
SDA0B
SCL2
SDA2
FOR FACTORY USE
HC21
STB5V
SRQ1
GND
SD_TX
SD_RX
SCL0A
SDA0A
NC

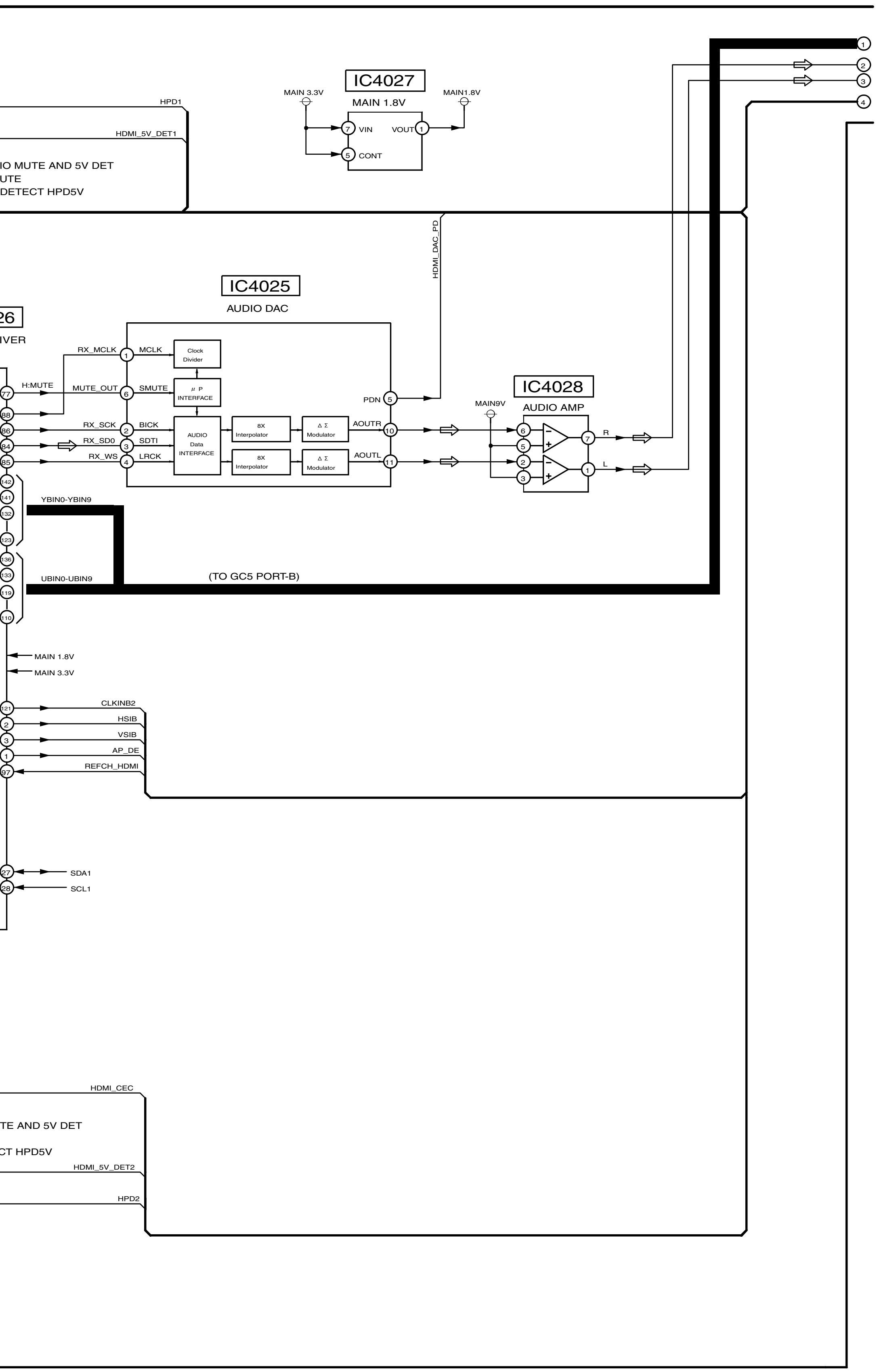
TH-50PV60A
HC and TA-Board Schematic Diagram

5 6 7 8

14.17. DG-Board (1 of 3) Block Diagram

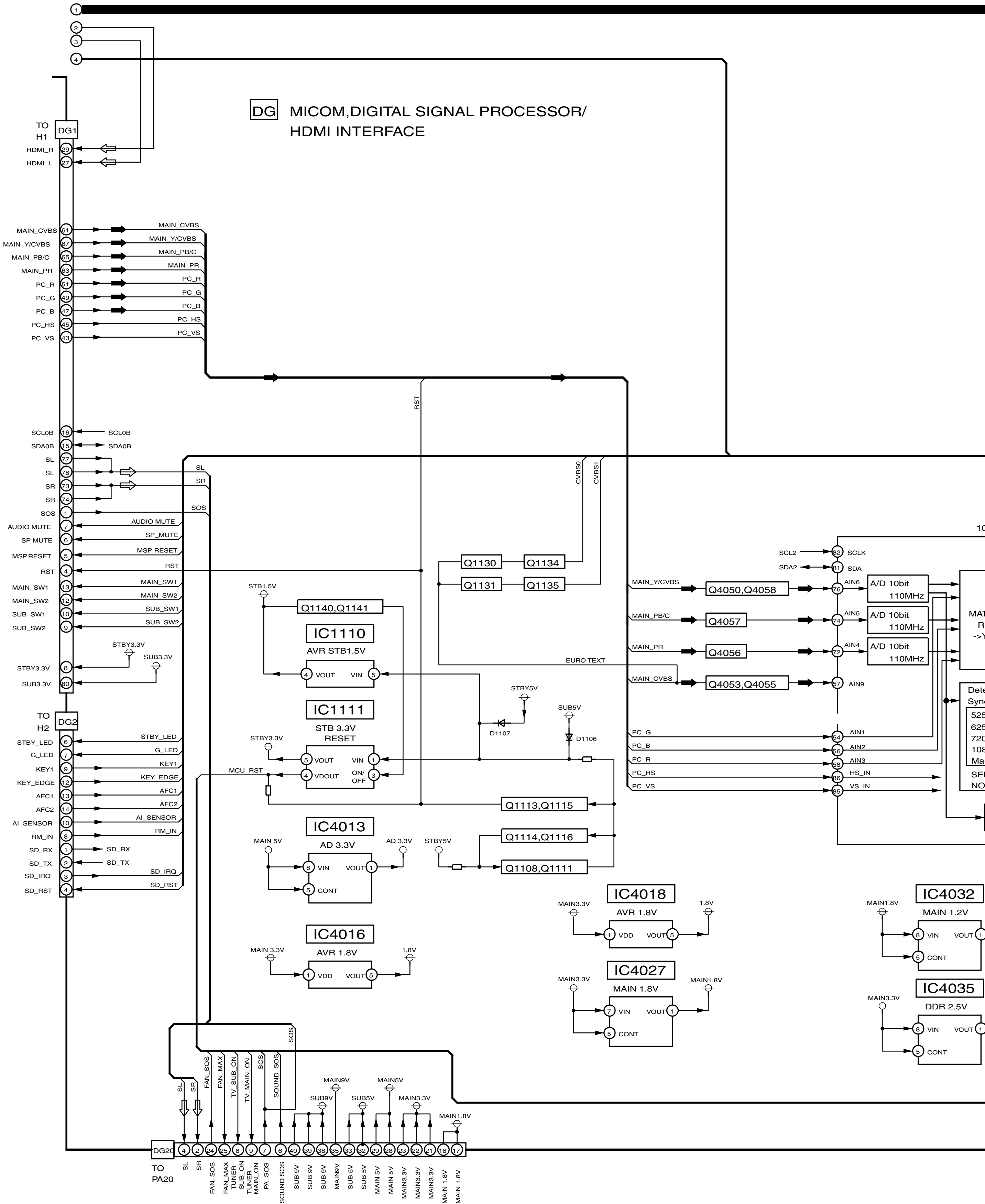

DG
MICOM,DIGITAL SIGNAL PROCESSOR/
HDMI INTERFACE
MAIN 5V
HOTPLUG
Q4066
Q4067
Q4082
CABLE IN;Hi/NORM
CABLE OUT;LOW/MUTE
Q4069
AUDIO MUTE AND 5V DET
Hi;MUTE
Low;DETECT HPD5V
HDMI_WP
HDMI_RST
HDMI_INT
IC4023
EEPROM
WC
SDA
SCL
DDC_SDA0
DDC_SCL0
D1
S1
D2
S2
3.3V_SDA
3.3V_SCL
Q4070
5V
3.3V
IC4026
HDMI I/F RECEIVER
RX_MCLK
DSCL0
DSDA0
RESET
INT
R0PWR5V
MUTE OUT
H:MUTE
MUTE_OUT
MCLK
SCK
SD0
WS
RX_SCK
RX_SD0
RX_WS
AUDIO INTERFACE
DG9
HDMI 1 IN
D2+
D2G
D2-
D1+
D1G
D1-
D0+
D0G
D0-
CLK+
CLKG
CLK-
CEC
N.C.
SCL
DDC DATA
DDCG
+5V
HPDT
ROX2+
ROX2-
ROX1+
ROX1-
ROX0+
ROX0-
ROXC+
ROXC-
CPU
TMDS DATA RECEIVER AND TMDS DECODER
HDCP CIPHER DECRYPTOR
VIDEO INTERFACE
YBIN0-YBIN9
UBIN0-UBIN9
MAIN 1.8V
MAIN 3.3V
ODCK
HSYNC
VSYNC
DE
XTALIN
CLKIN
REFCH_H
R1X2+
R1X2-
R1X1+
R1X1-
R1X0+
R1X0-
R1XC+
R1XC-
TMDS DATA RECEIVE AND TMDS DECODER
CSDA
CSCL
SDA1
SCL1
DSDA1
DSCL1
R1PWR5V
Q4071
DG8
HDMI 2 IN
DDC_SDA1
DDC_SCL1
IC4022
EEPROM
HDMI_C
Q4083
Q4068
HDMI_5V_DE
Q4065

TH-50PV60A
DG-Board (1 of 3) Block Diagram

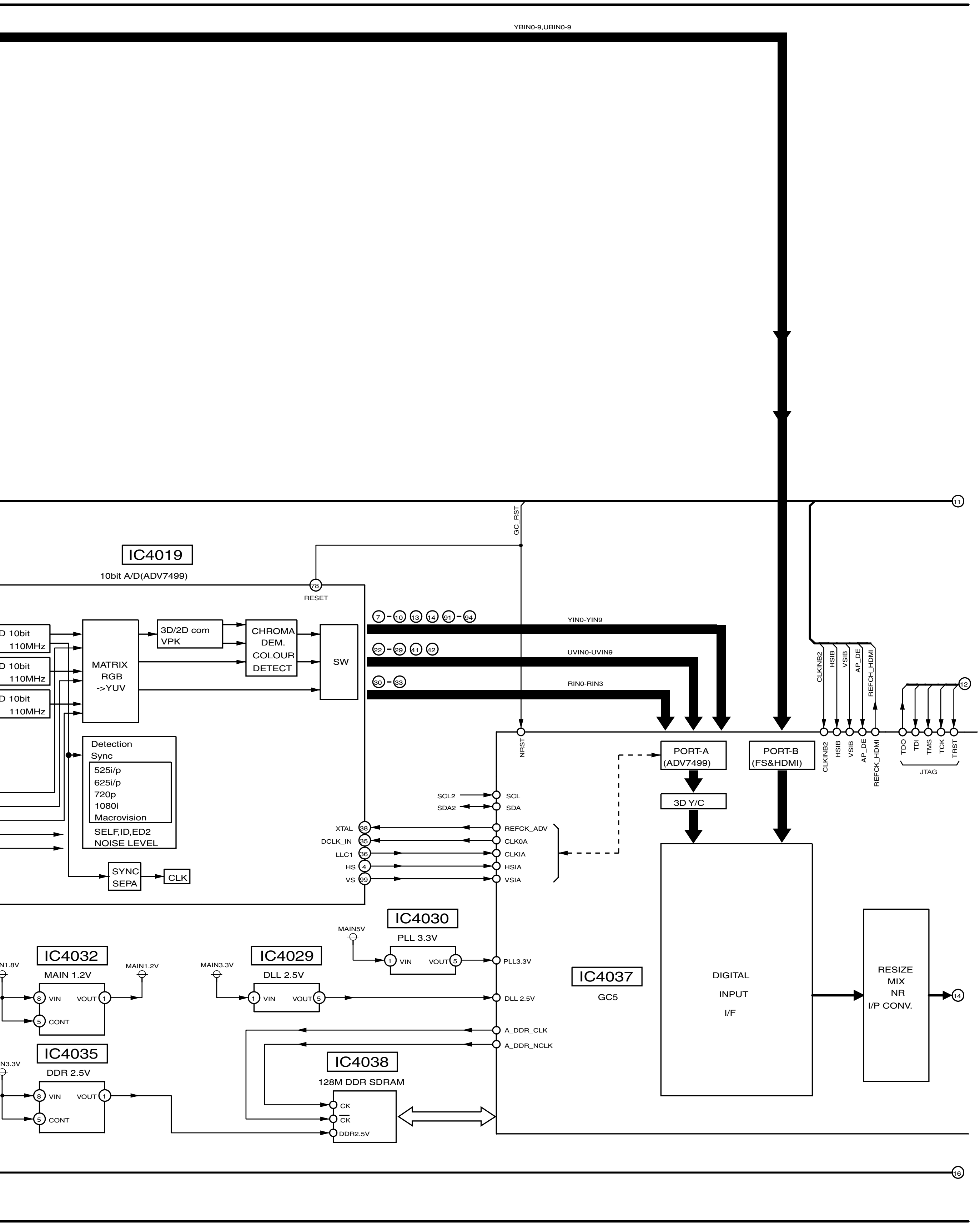

IC4027
MAIN 1.8V
MAIN 3.3V
MAIN1.8V
7 VIN
VOUT 1
5 CONT
HPD1
HDMI_5V_DET1
IO MUTE AND 5V DET
UTE
DETECT HPD5V
HDMI_DAC_PD
IC4025
AUDIO DAC
26
IVER
RX_MCLK
MCLK
Clock Divider
H:MUTE
MUTE_OUT
SMUTE
μ P INTERFACE
PDN 5
RX_SCK
BICK
RX_SD0
SDTI
RX_WS
LRCK
AUDIO Data INTERFACE
8X Interpolator
Δ Σ Modulator
AOUTR
AOUTL
MAIN9V
IC4028
AUDIO AMP
R
L
77
88
86
84
85
142
141
132
123
136
133
119
110
YBIN0-YBIN9
UBIN0-UBIN9
(TO GC5 PORT-B)
MAIN 1.8V
MAIN 3.3V
121
CLKINB2
HSIB
VSIB
AP_DE
REFCH_HDMI
97
27
28
SDA1
SCL1
HDMI_CEC
TE AND 5V DET
CT HPD5V
HDMI_5V_DET2
HPD2
1
2
3
4

TH-50PV60A
DG-Board (1 of 3) Block Diagram

14.18. DG-Board (2 of 3) Block Diagram


DG
MICOM,DIGITAL SIGNAL PROCESSOR/
HDMI INTERFACE
TO
H1
DG1
HDMI_R
HDMI_L
MAIN_CVBS
MAIN_Y/CVBS
MAIN_PB/C
MAIN_PR
PC_R
PC_G
PC_B
PC_HS
PC_VS
RST
SCL0B
SDA0B
SL
SL
SR
SR
SOS
AUDIO MUTE
SP MUTE
MSP.RESET
RST
MAIN_SW1
MAIN_SW2
SUB_SW1
SUB_SW2
STBY3.3V
SUB3.3V
SP_MUTE
MSP RESET
CVBS0
CVBS1
Q1130
Q1134
Q1131
Q1135
STB1.5V
Q1140,Q1141
IC1110
AVR STB1.5V
VOUT
VIN
IC1111
STB 3.3V
RESET
STBY3.3V
VOUT
VIN
VDOUT
ON/
OFF
MCU_RST
EURO TEXT
STBY5V
SUB5V
D1107
D1106
Q1113,Q1115
Q1114,Q1116
Q1108,Q1111
IC4013
AD 3.3V
MAIN 5V
AD 3.3V
STBY5V
VIN
VOUT
CONT
IC4016
AVR 1.8V
MAIN 3.3V
1.8V
VDD
VOUT
IC4018
AVR 1.8V
MAIN3.3V
1.8V
IC4027
MAIN 1.8V
MAIN3.3V
MAIN1.8V
IC4032
MAIN 1.2V
MAIN1.8V
IC4035
DDR 2.5V
MAIN3.3V
SCL2
SDA2
SCLK
SDA
MAIN_Y/CVBS
Q4050,Q4058
AIN6
A/D 10bit
110MHz
MAIN_PB/C
Q4057
AIN5
A/D 10bit
110MHz
MAIN_PR
Q4056
AIN4
A/D 10bit
110MHz
MAIN_CVBS
Q4053,Q4055
AIN9
PC_G
PC_B
PC_R
PC_HS
PC_VS
AIN1
AIN2
AIN3
HS_IN
VS_IN
MAT
R
->Y
Dete
Sync
525
625
720
108
Mac
SEI
NO
10
TO
H2
DG2
STBY_LED
G_LED
KEY1
KEY_EDGE
AFC1
AFC2
AI_SENSOR
RM_IN
SD_RX
SD_TX
SD_IRQ
SD_RST
SOS
SL
SR
FAN_SOS
FAN_MAX
TV_SUB_ON
TV_MAIN_ON
SOS
SOUND_SOS
MAIN9V
MAIN5V
SUB9V
SUB5V
MAIN3.3V
MAIN1.8V
DG20
TO
PA20
SL
SR
FAN_SOS
FAN_MAX
TUNER SUB_ON
TUNER MAIN_ON
PA_SOS
SOUND SOS
SUB 9V
SUB 9V
SUB 9V
MAIN9V
SUB 5V
SUB 5V
MAIN 5V
MAIN3.3V
MAIN3.3V
MAIN3.3V
MAIN 1.8V
MAIN 1.8V

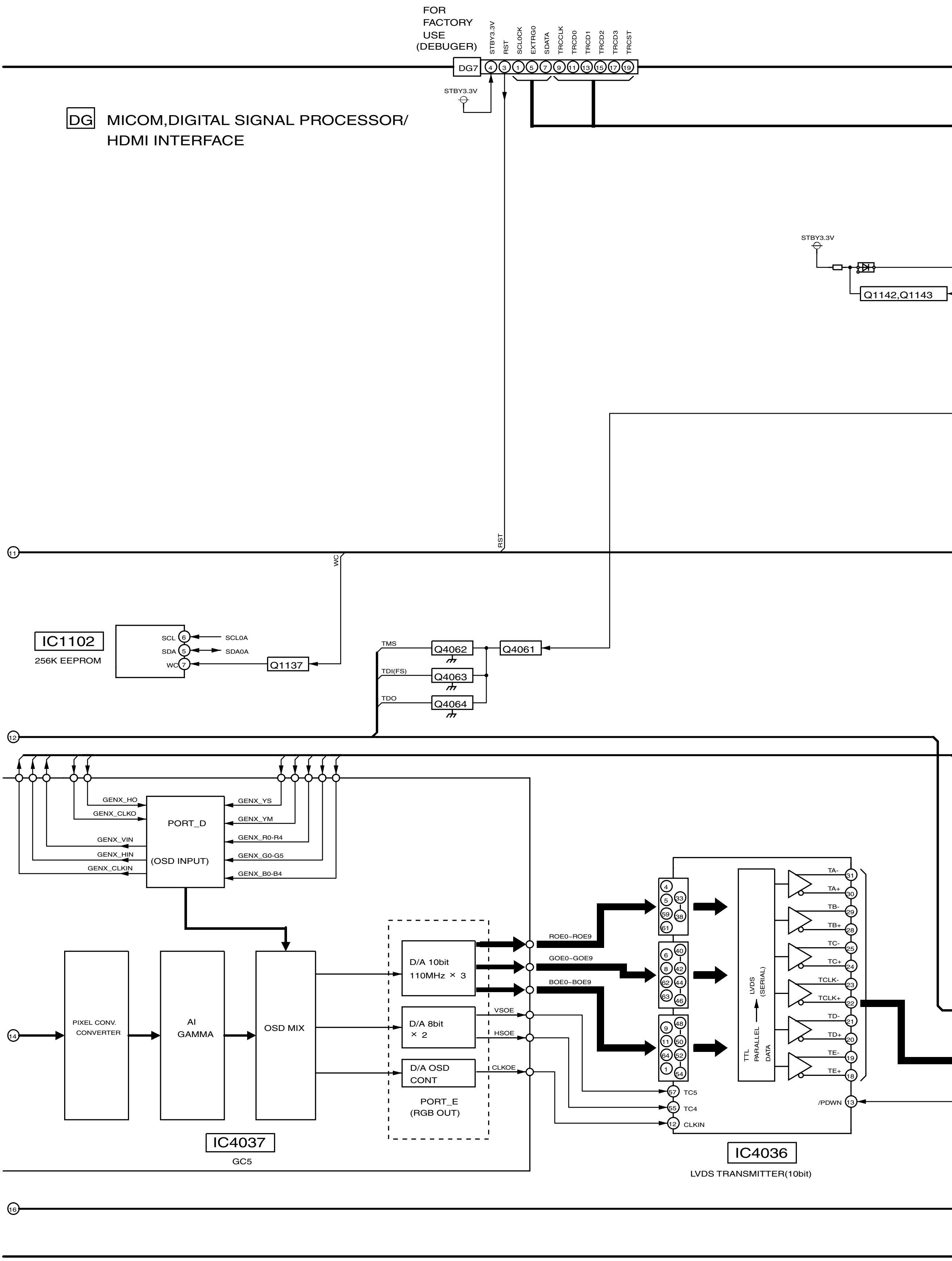
TH-50PV60A DG-Board (2 of 3) Block Diagram



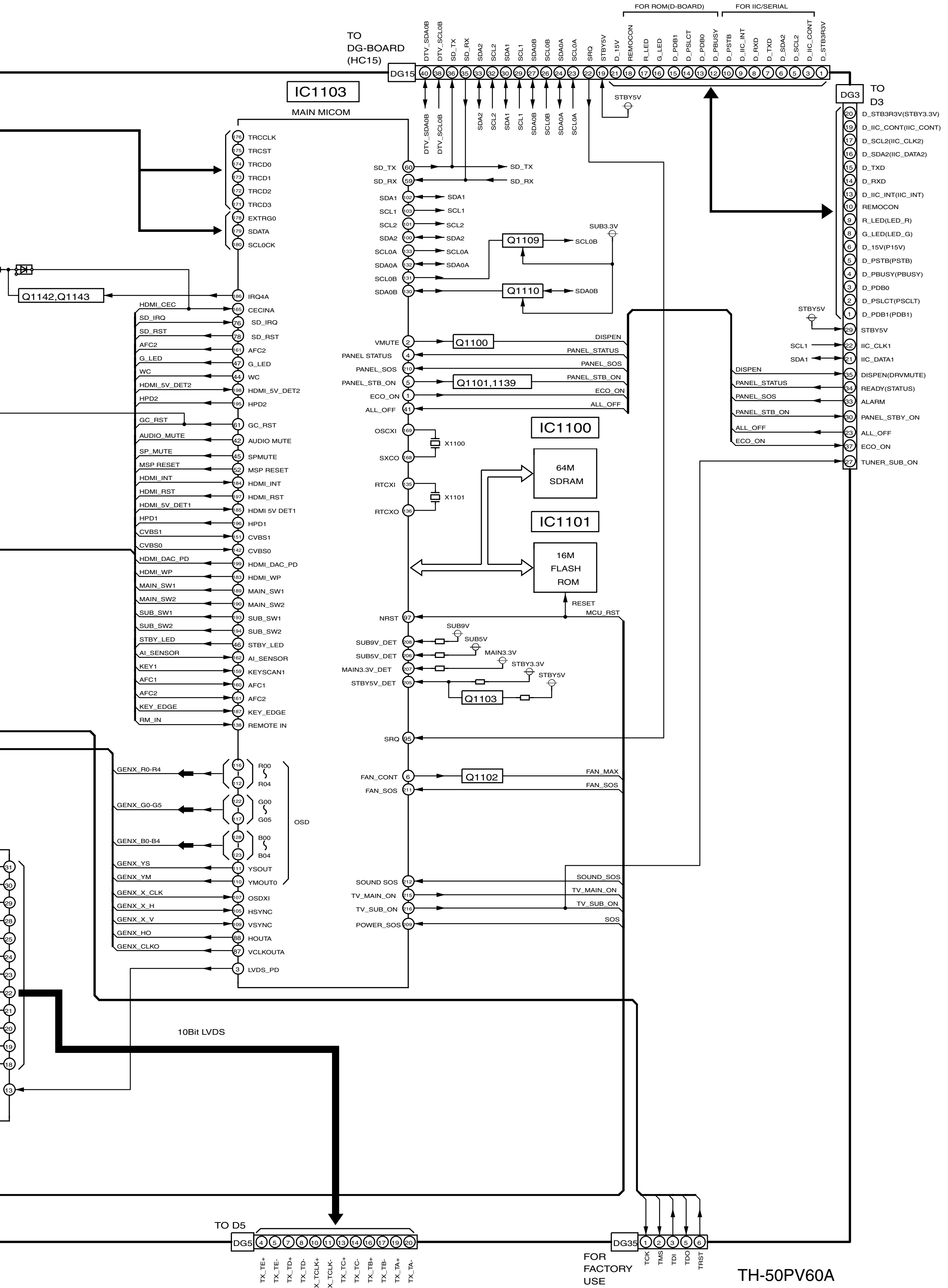
YBIN0-9,UBIN0-9
11
GC_RST
IC4019
10bit A/D(ADV7499)
78
RESET
D 10bit
110MHz
D 10bit
110MHz
D 10bit
110MHz
MATRIX
RGB
->YUV
3D/2D com
VPK
CHROMA
DEM.
COLOUR
DETECT
SW
Detection
Sync
525i/p
625i/p
720p
1080i
Macrovision
SELF,ID,ED2
NOISE LEVEL
SYNC
SEPA
CLK
7 - 10 13 14 91 - 94
22 - 29 41 42
30 - 33
YIN0-YIN9
UVIN0-UVIN9
RIN0-RIN3
CLKINB2
HSIB
VSIB
AP_DE
REFCH_HDMI
12
NRST
PORT-A
(ADV7499)
PORT-B
(FS&HDMI)
CLKINB2
HSIB
VSIB
AP_DE
REFCK_HDMI
TDO
TDI
TMS
TCK
TRST
JTAG
3D Y/C
SCL2
SDA2
SCL
SDA
XTAL
DCLK_IN
LLC1
HS
VS
38
35
36
4
99
REFCK_ADV
CLK0A
CLKIA
HSIA
VSIA
IC4030
MAIN5V
PLL 3.3V
1 VIN VOUT 5
PLL3.3V
IC4032
N1.8V
MAIN 1.2V
MAIN1.2V
8 VIN VOUT 1
5 CONT
IC4029
MAIN3.3V
DLL 2.5V
1 VIN VOUT 5
DLL 2.5V
IC4037
GC5
DIGITAL
INPUT
I/F
RESIZE
MIX
NR
I/P CONV.
14
A_DDR_CLK
A_DDR_NCLK
IC4035
N3.3V
DDR 2.5V
8 VIN VOUT 1
5 CONT
IC4038
128M DDR SDRAM
CK
$\overline{CK}$
DDR2.5V
16

TH-50PV60A
DG-Board (2 of 3) Block Diagram

14.19. DG-Board (3 of 3) Block Diagram

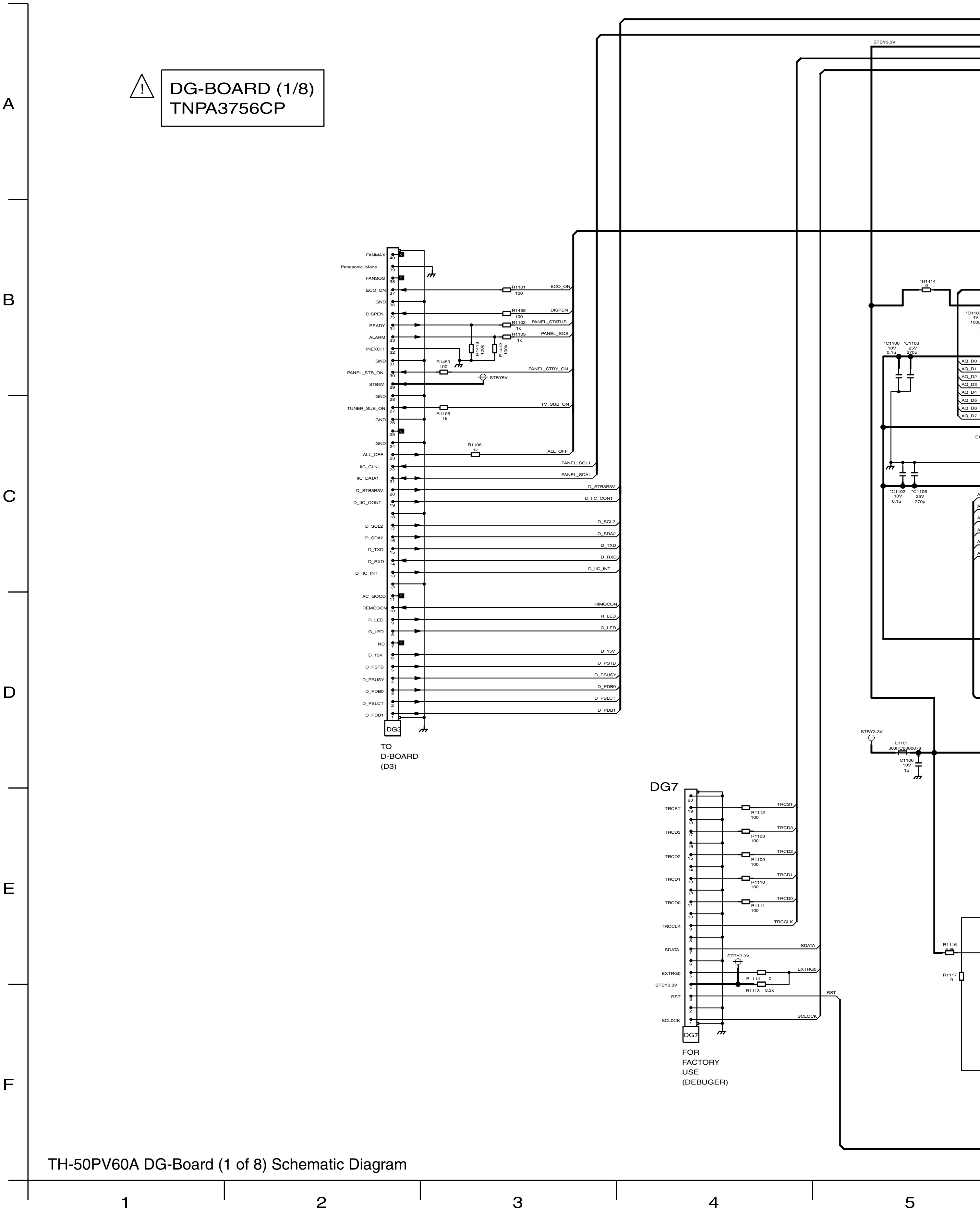

FOR FACTORY USE (DEBUGER)
DG7
STBY3.3V
RST
SCLOCK
EXTRG0
SDATA
TRCCLK
TRCD0
TRCD1
TRCD2
TRCD3
TRCST
4
3
1
5
7
9
11
13
15
17
19
STBY3.3V
DG
MICOM,DIGITAL SIGNAL PROCESSOR/
HDMI INTERFACE
STBY3.3V
Q1142,Q1143
11
RST
WC
IC1102
256K EEPROM
SCL
SDA
WC
6
5
7
SCL0A
SDA0A
Q1137
TMS
TDI(FS)
TDO
Q4062
Q4063
Q4064
Q4061
12
GENX_HO
GENX_CLKO
GENX_VIN
GENX_HIN
GENX_CLKIN
PORT_D
(OSD INPUT)
GENX_YS
GENX_YM
GENX_R0-R4
GENX_G0-G5
GENX_B0-B4
14
PIXEL CONV. CONVERTER
AI GAMMA
OSD MIX
D/A 10bit 110MHz × 3
D/A 8bit × 2
D/A OSD CONT
PORT_E (RGB OUT)
IC4037
GC5
ROE0~ROE9
GOE0~GOE9
BOE0~BOE9
VSOE
HSOE
CLKOE
4
5
59
61
33
38
6
8
62
63
40
42
44
46
9
11
64
1
48
50
52
54
57
55
12
TC5
TC4
CLKIN
TTL PARALLEL DATA
LVDS (SERIAL)
TA-
TA+
TB-
TB+
TC-
TC+
TCLK-
TCLK+
TD-
TD+
TE-
TE+
31
30
29
28
25
24
23
22
21
20
19
18
/PDWN
13
IC4036
LVDS TRANSMITTER(10bit)
16

TH-50PV60A
DG-Board (3 of 3) Block Diagram

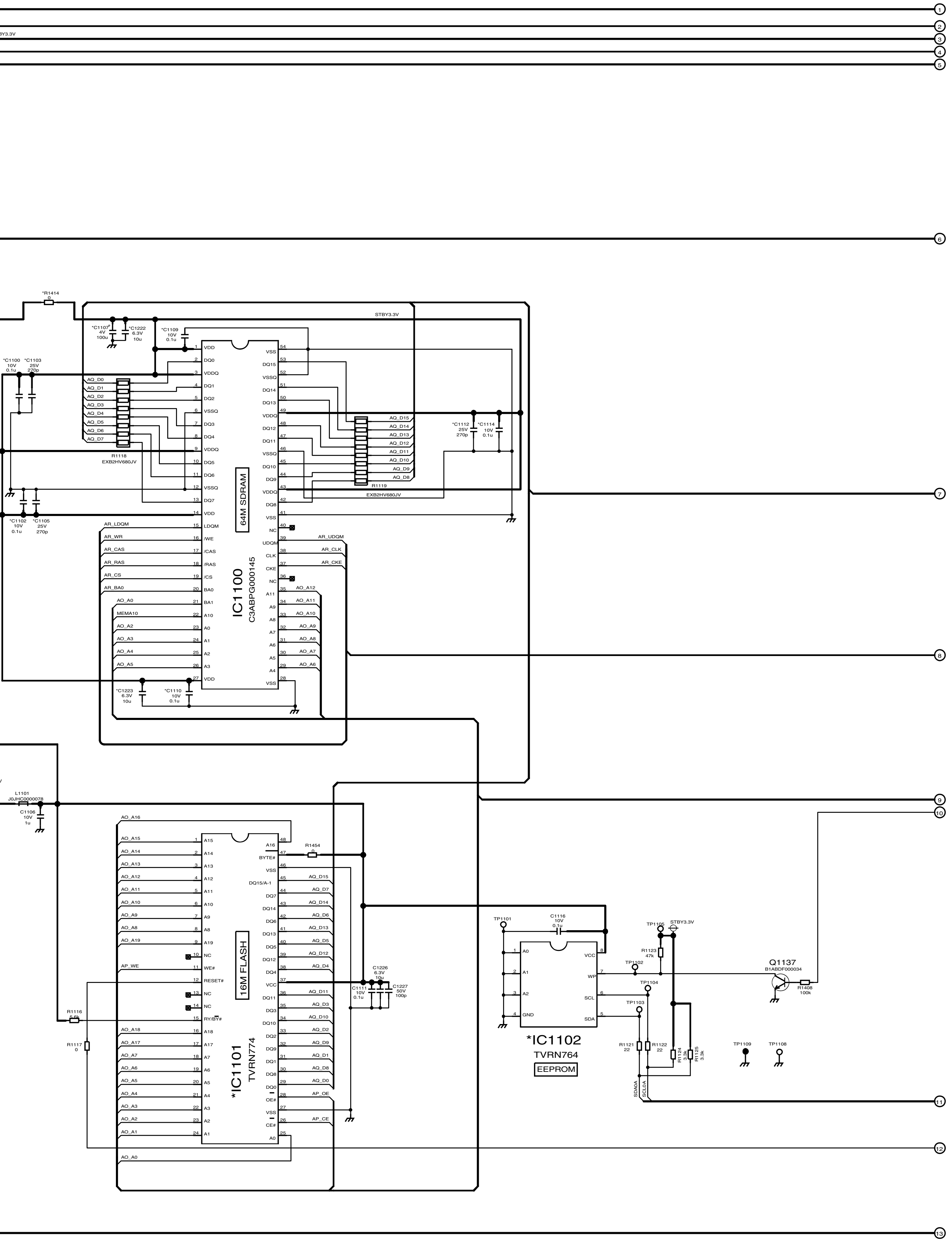

TO
DG-BOARD
(HC15)
DG15
FOR ROM(D-BOARD)
FOR IIC/SERIAL
DTV_SDA0B
DTV_SCL0B
SD_TX
SD_RX
SDA2
SCL2
SDA1
SCL1
SDA0B
SCL0B
SDA0A
SCL0A
SRQ
STBY5V
D_15V
REMOCON
R_LED
G_LED
D_PDB1
D_PSLCT
D_PDB0
D_PBUSY
D_PSTB
D_IIC_INT
D_RXD
D_TXD
D_SDA2
D_SCL2
D_IIC_CONT
D_STB3R3V
40 38 36 35 33 32 30 29 27 26 24 23 22 19 21 18 17 16 15 14 13 12 10 9 8 7 6 5 3 1
IC1103
MAIN MICOM
TRCCLK
TRCST
TRCD0
TRCD1
TRCD2
TRCD3
EXTRG0
SDATA
SCL0CK
IRQ4A
CECINA
SD_IRQ
SD_RST
AFC2
G_LED
WC
HDMI_5V_DET2
HPD2
GC_RST
AUDIO MUTE
SPMUTE
MSP RESET
HDMI_INT
HDMI_RST
HDMI 5V DET1
HPD1
CVBS1
CVBS0
HDMI_DAC_PD
HDMI_WP
MAIN_SW1
MAIN_SW2
SUB_SW1
SUB_SW2
STBY_LED
AI_SENSOR
KEYSCAN1
AFC1
AFC2
KEY_EDGE
REMOTE IN
Q1142,Q1143
HDMI_CEC
SD_IRQ
SD_RST
AFC2
G_LED
WC
HDMI_5V_DET2
HPD2
GC_RST
AUDIO_MUTE
SP_MUTE
MSP RESET
HDMI_INT
HDMI_RST
HDMI_5V_DET1
HPD1
CVBS1
CVBS0
HDMI_DAC_PD
HDMI_WP
MAIN_SW1
MAIN_SW2
SUB_SW1
SUB_SW2
STBY_LED
AI_SENSOR
KEY1
AFC1
AFC2
KEY_EDGE
RM_IN
GENX_R0-R4
GENX_G0-G5
GENX_B0-B4
GENX_YS
GENX_YM
GENX_X_CLK
GENX_X_H
GENX_X_V
GENX_HO
GENX_CLKO
R00
R04
G00
G05
B00
B04
OSD
YSOUT
YMOUT0
OSDXI
HSYNC
VSYNC
HOUTA
VCLKOUTA
LVDS_PD
SD_TX
SD_RX
SDA1
SCL1
SCL2
SDA2
SCL0A
SDA0A
SCL0B
SDA0B
Q1109
Q1110
SUB3.3V
SCL0B
SDA0B
VMUTE
PANEL STATUS
PANEL_SOS
PANEL_STB_ON
ECO_ON
ALL_OFF
Q1100
Q1101,1139
DISPEN
PANEL_STATUS
PANEL_SOS
PANEL_STB_ON
ECO_ON
ALL_OFF
OSCXI
SXCO
X1100
RTCXI
RTCXO
X1101
IC1100
64M
SDRAM
IC1101
16M
FLASH
ROM
RESET
MCU_RST
NRST
SUB9V
SUB5V
MAIN3.3V
STBY3.3V
STBY5V
SUB9V_DET
SUB5V_DET
MAIN3.3V_DET
STBY5V_DET
Q1103
SRQ
FAN_CONT
FAN_SOS
Q1102
FAN_MAX
FAN_SOS
SOUND SOS
TV_MAIN_ON
TV_SUB_ON
POWER_SOS
SOUND_SOS
TV_MAIN_ON
TV_SUB_ON
SOS
10Bit LVDS
TO
D3
DG3
STBY5V
D_STB3R3V(STBY3.3V)
D_IIC_CONT(IIC_CONT)
D_SCL2(IIC_CLK2)
D_SDA2(IIC_DATA2)
D_TXD
D_RXD
D_IIC_INT(IIC_INT)
REMOCON
R_LED(LED_R)
G_LED(LED_G)
D_15V(P15V)
D_PSTB(PSTB)
D_PBUSY(PBUSY)
D_PDB0
D_PSLCT(PSCLT)
D_PDB1(PDB1)
STBY5V
IIC_CLK1
IIC_DATA1
SCL1
SDA1
DISPEN(DRVMUTE)
READY(STATUS)
ALARM
PANEL_STBY_ON
ALL_OFF
ECO_ON
TUNER_SUB_ON
DISPEN
PANEL_STATUS
PANEL_SOS
PANEL_STB_ON
ALL_OFF
ECO_ON
TO D5
DG5
TX_TE+
TX_TE-
TX_TD+
TX_TD-
TX_TCLK+
TX_TCLK-
TX_TC+
TX_TC-
TX_TB+
TX_TB-
TX_TA+
TX_TA-
FOR
FACTORY
USE
DG35
TCK
TMS
TDI
TDO
TRST

TH-50PV60A
DG-Board (3 of 3) Block Diagram

14.20. DG-Board (1 of 8) Schematic Diagram


A
B
C
D
E
F
1
2
3
4
5
DG-BOARD (1/8)
TNPA3756CP
STBY3.3V
FANMAX
Panasonic_Mode
FANSOS
ECO_ON
GND
DISPEN
READY
ALARM
INEXCH
GND
PANEL_STB_ON
STB5V
GND
TUNER_SUB_ON
GND
GND
ALL_OFF
IIC_CLK1
IIC_DATA1
D_STB3R3V
D_IIC_CONT
D_SCL2
D_SDA2
D_TXD
D_RXD
D_IIC_INT
AC_GOOD
REMOCON
R_LED
G_LED
NC
D_15V
D_PSTB
D_PBUSY
D_PDB0
D_PSLCT
D_PDB1
DG3
TO
D-BOARD
(D3)
R1101
100
ECO_ON
R1458
100
DISPEN
R1102
1k
PANEL_STATUS
R1103
1k
PANEL_SOS
R1413
100k
R1412
100k
R1459
100
PANEL_STBY_ON
STBY5V
R1105
1k
TV_SUB_ON
R1106
1k
ALL_OFF
PANEL_SCL1
PANEL_SDA1
D_STB3R3V
D_IIC_CONT
D_SCL2
D_SDA2
D_TXD
D_RXD
D_IIC_INT
RIMOCON
R_LED
G_LED
D_15V
D_PSTB
D_PBUSY
D_PDB0
D_PSLCT
D_PDB1
*R1414
0
*C1100
10V
0.1u
*C1103
25V
270p
AQ_D0
AQ_D1
AQ_D2
AQ_D3
AQ_D4
AQ_D5
AQ_D6
AQ_D7
*C1102
10V
0.1u
*C1105
25V
270p
STBY3.3V
L1101
J0JHC0000078
C1106
10V
1u
DG7
TRCST
TRCD3
TRCD2
TRCD1
TRCD0
TRCCLK
SDATA
EXTRG0
STBY3.3V
RST
SCL0CK
R1112
100
TRCST
R1108
100
TRCD3
R1109
100
TRCD2
R1110
100
TRCD1
R1111
100
TRCD0
TRCCLK
SDATA
STBY3.3V
R1114
0
EXTRG0
R1113
3.3k
RST
SCLOCK
DG7
FOR
FACTORY
USE
(DEBUGER)
R1116
5.6k
R1117
0

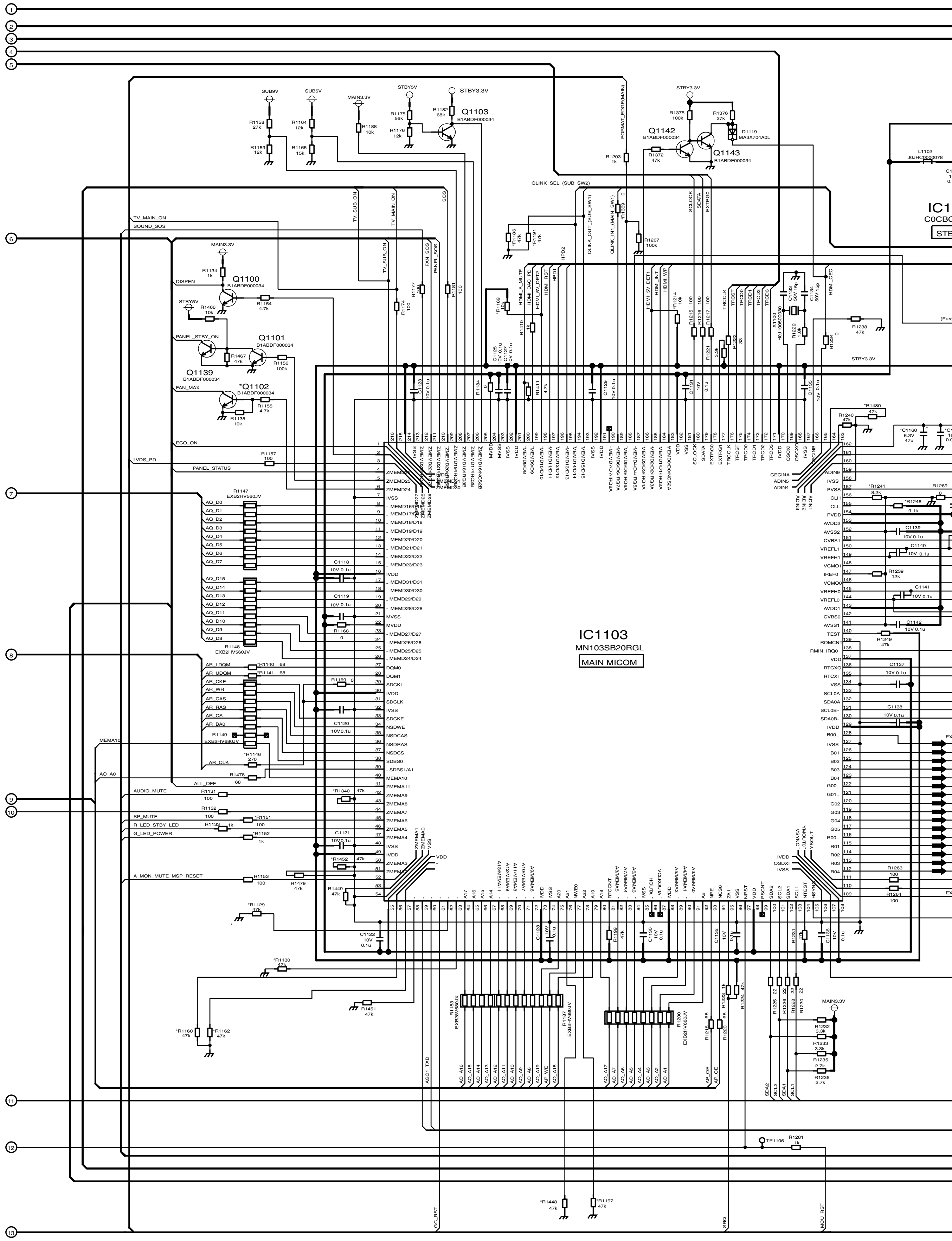
TH-50PV60A DG-Board (1 of 8) Schematic Diagram


STBY3.3V
*R1414
*C1107 4V 100u
*C1222 6.3V 10u
*C1109 10V 0.1u
*C1100 10V 0.1u
*C1103 25V 270p
R1118 EXB2HV680JV
*C1102 10V 0.1u
*C1105 25V 270p
64M SDRAM
IC1100
C3ABPG000145
R1119 EXB2HV680JV
*C1112 25V 270p
*C1114 10V 0.1u
*C1223 6.3V 10u
*C1110 10V 0.1u
L1101 J0JHC0000078
C1106 10V 1u
R1454 0
16M FLASH
*IC1101
TVRN774
C1226 6.3V 10u
C1111 10V 0.1u
C1227 50V 100p
R1116 5.6k
R1117 0
TP1101
C1116 10V 0.1u
*IC1102
TVRN764
EEPROM
TP1105
R1123 47k
TP1102
TP1104
TP1103
R1121 22
R1122 22
R1124 3.3k
R1125 3.3k
Q1137
B1ABDF000034
R1408 100k
TP1109
TP1108
SDA0A
SCL0A
1
2
3
4
5
6
7
8
9
10
11
12
13

TH-50PV60A DG-Board (1 of 8) Schematic Diagram

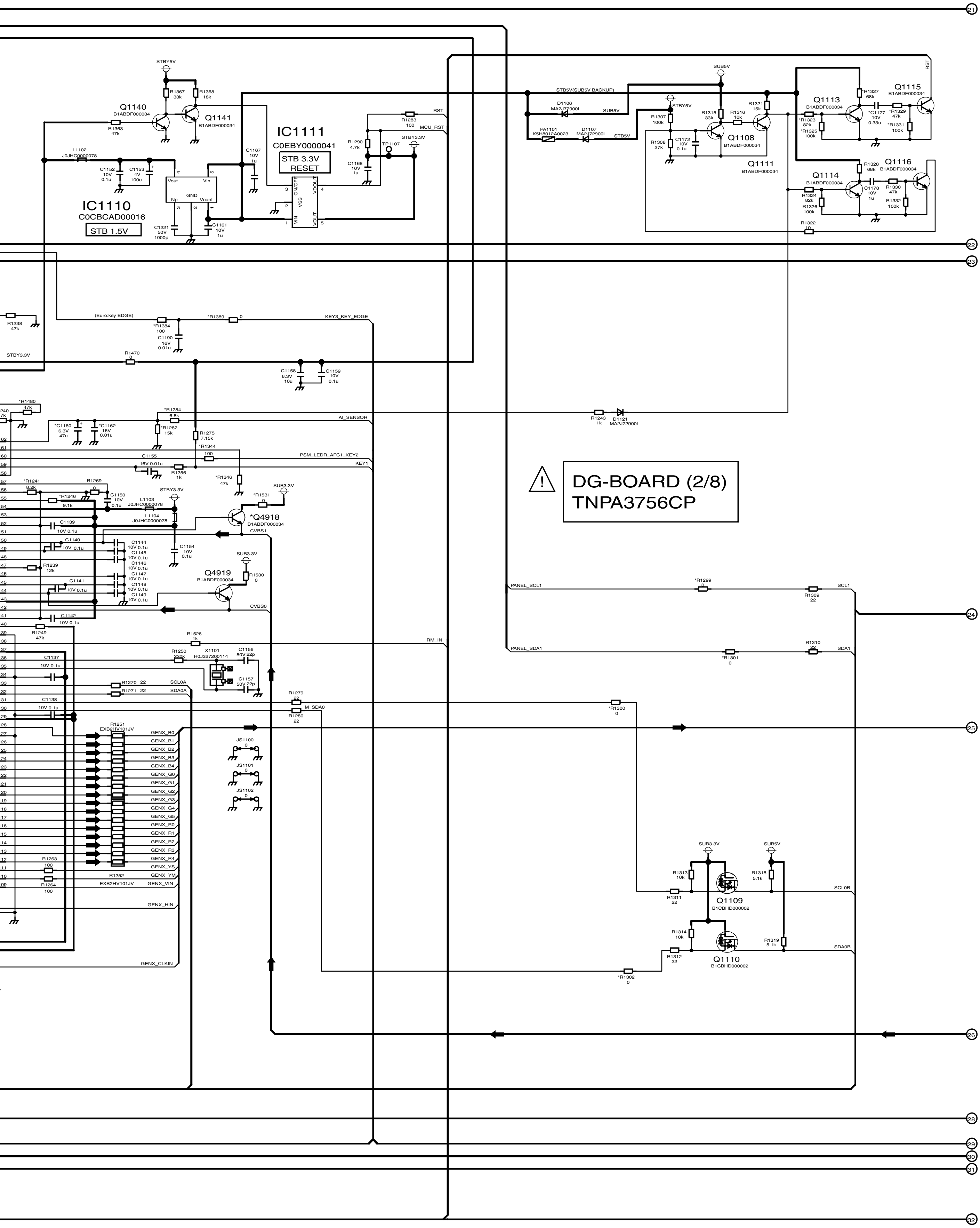
5 6 7 8 9

14.21. DG-Board (2 of 8) Schematic Diagram


IC1103
MN103SB20RGL
MAIN MICOM
Q1100 B1ABDF000034
Q1101 B1ABDF000034
*Q1102 B1ABDF000034
Q1103 B1ABDF000034
Q1139 B1ABDF000034
Q1142 B1ABDF000034
Q1143 B1ABDF000034
D1119 MA3X704A0L
X1100
L1102 J0JHC0000078
R1147 EXB2HV560JV
R1148 EXB2HV560JV
R1149 EXB2HV680JV
R1183 EXB2HV680JV
R1187 EXB2HV680JV
R1200 EXB2HV680JV
SUB9V
SUB5V
MAIN3.3V
STBY5V
STBY3.3V
FORMAT_EDGE(MAIN)
QLINK_SEL_(SUB_SW2)
QLINK_OUT_(SUB_SW1)
QLINK_IN1_(MAIN_SW1)
TV_MAIN_ON
SOUND_SOS
DISPEN
PANEL_STBY_ON
FAN_MAX
ECO_ON
LVDS_PD
PANEL_STATUS
MEMA10
AO_A0
ALL_OFF
AUDIO_MUTE
SP_MUTE
R_LED_STBY_LED
G_LED_POWER
A_MON_MUTE_MSP_RESET
AR_CLK
TV_SUB_ON
FAN_SOS
PANEL_SOS
SOS
HDMI_A_MUTE
HDMI_5V_DET1
HDMI_INT
HDMI_WP
HDMI_CEC
HPD1
HPD2
SCLOCK
SDATA
EXTRG0
TRCCLK
TRCST
TRCD0
TRCD1
TRCD2
TRCD3
AGC1_TXD
GC_RST
SRQ
MCU_RST
SDA2
SCL2
SDA1
SCL1
TP1106
1
2
3
4
5
6
7
8
9
10
11
12
13

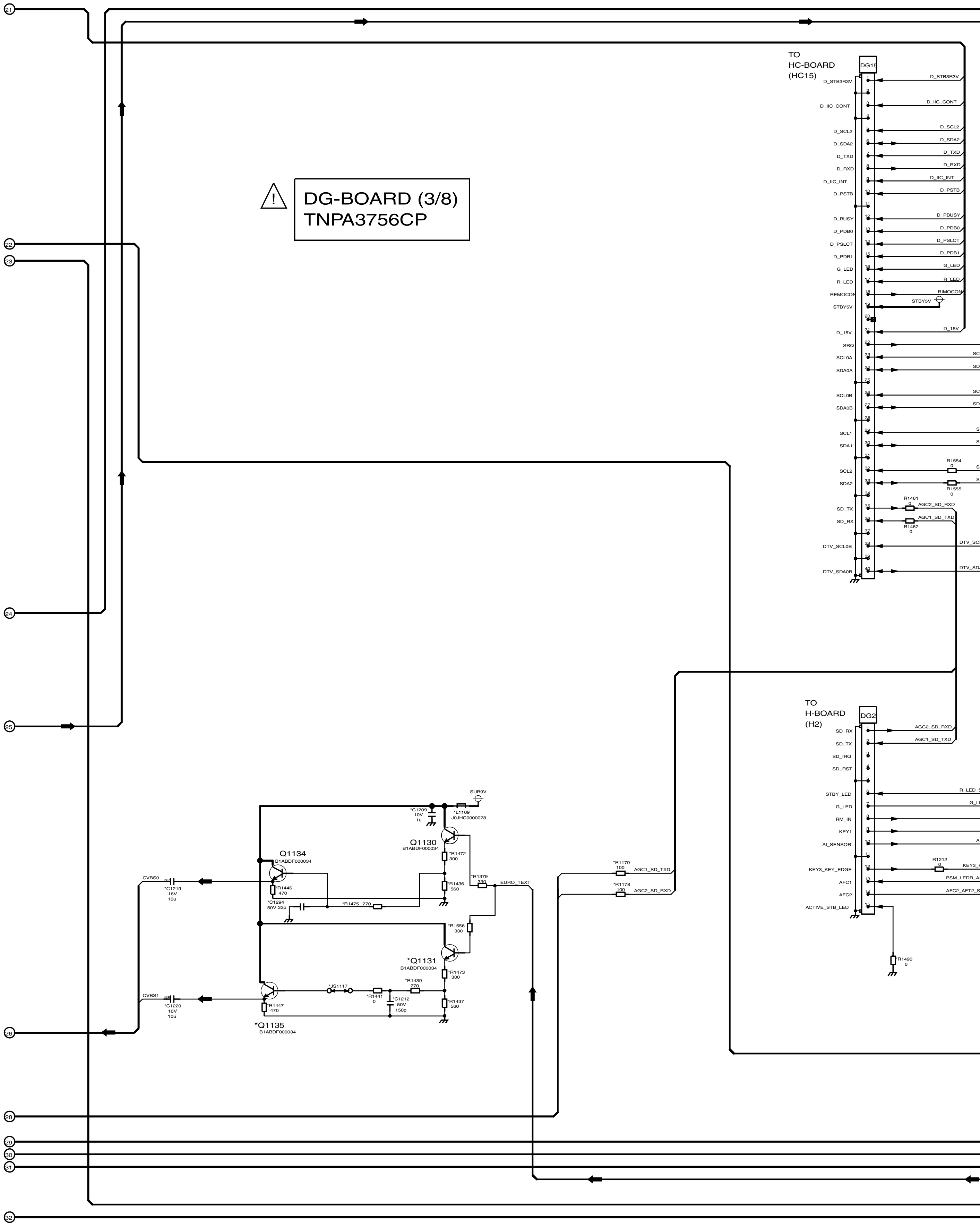
TH-50PV60A DG-Board (2 of 8) Schematic Diagram

10
11
12
13
14


DG-BOARD (2/8)
TNPA3756CP
IC1110
C0CBCAD00016
STB 1.5V
IC1111
C0EBY0000041
STB 3.3V
RESET
Q1140
Q1141
Q1108
Q1111
Q1113
Q1114
Q1115
Q1116
*Q4918
Q4919
Q1109
Q1110
B1ABDF000034
B1CBHD000002
STBY5V
STBY3.3V
SUB5V
SUB3.3V
STB5V(SUB5V BACKUP)
RST
MCU_RST
TP1107
(Euro:key EDGE)
KEY3_KEY_EDGE
AI_SENSOR
PSM_LEDR_AFC1_KEY2
KEY1
CVBS1
CVBS0
RM_IN
PANEL_SCL1
PANEL_SDA1
SCL1
SDA1
SCL0A
SDA0A
M_SDA0
SCL0B
SDA0B
X1101
H0J327200114
R1251
EXB2HV101JV
R1252
GENX_B0
GENX_B1
GENX_B2
GENX_B3
GENX_B4
GENX_G0
GENX_G1
GENX_G2
GENX_G3
GENX_G4
GENX_G5
GENX_R0
GENX_R1
GENX_R2
GENX_R3
GENX_R4
GENX_YS
GENX_YM
GENX_VIN
GENX_HIN
GENX_CLKIN
JS1100
JS1101
JS1102
D1106
D1107
D1121
MA2J72900L
PA1101
K5H8012A0023
21
22
23
24
25
26
28
29
30
31
32
14
15
16
17
18

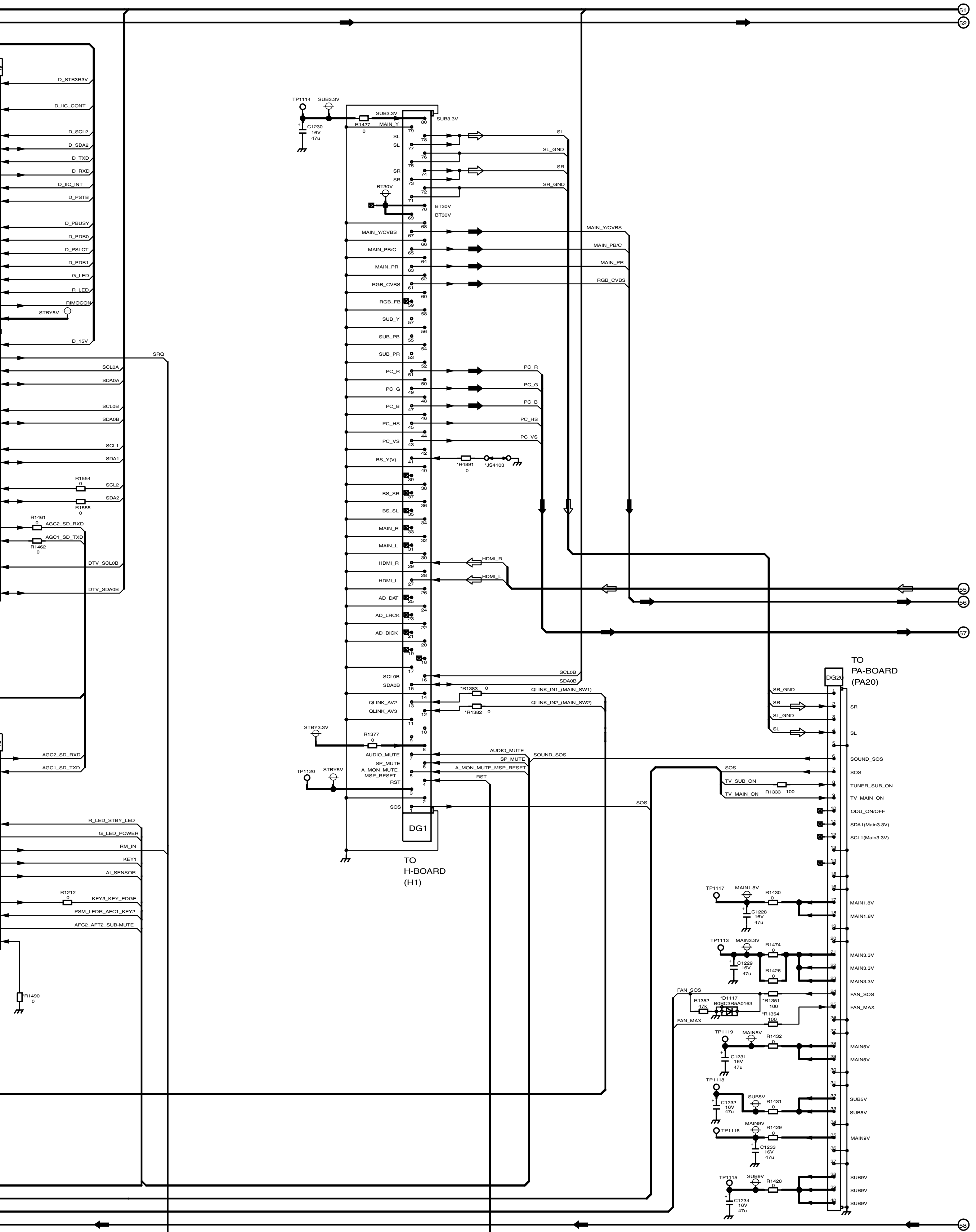
TH-50PV60A DG-Board (2 of 8) Schematic Diagram

14.22. DG-Board (3 of 8) Schematic Diagram


21
22
23
24
25
26
28
29
30
31
32
DG-BOARD (3/8)
TNPA3756CP
TO
HC-BOARD
(HC15)
DG15
D_STB3R3V
D_IIC_CONT
D_SCL2
D_SDA2
D_TXD
D_RXD
D_IIC_INT
D_PSTB
D_BUSY
D_PBUSY
D_PDB0
D_PSLCT
D_PDB1
G_LED
R_LED
REMOCON
RIMOCON
STBY5V
D_15V
SRQ
SCL0A
SDA0A
SCL0B
SDA0B
SCL1
SDA1
SCL2
SDA2
R1554
0
R1555
0
SD_TX
SD_RX
R1461
0
R1462
0
AGC2_SD_RXD
AGC1_SD_TXD
DTV_SCL0B
DTV_SDA0B
TO
H-BOARD
(H2)
DG2
SD_RX
SD_TX
SD_IRQ
SD_RST
STBY_LED
G_LED
RM_IN
KEY1
AI_SENSOR
KEY3_KEY_EDGE
AFC1
AFC2
ACTIVE_STB_LED
R1212
0
*R1490
0
SUB9V
*C1209
10V
1u
*L1109
J0JHC0000078
Q1130
B1ABDF000034
*R1472
300
Q1134
B1ABDF000034
*R1446
470
*R1436
560
*R1379
330
EURO_TEXT
CVBS0
NP
*C1219
16V
10u
*C1294
50V 33p
*R1475 270
*R1556
330
*Q1131
B1ABDF000034
*R1473
300
*R1439
270
*JS1117
*R1441
0
*C1212
50V
150p
*R1437
560
CVBS1
NP
*C1220
16V
10u
*R1447
470
*Q1135
B1ABDF000034
*R1179
100
AGC1_SD_TXD
*R1178
100
AGC2_SD_RXD

TH-50PV60A DG-Board (3 of 8) Schematic Diagram

19	20	21	22	23


D_STB3R3V
D_IIC_CONT
D_SCL2
D_SDA2
D_TXD
D_RXD
D_IIC_INT
D_PSTB
D_PBUSY
D_PDB0
D_PSLCT
D_PDB1
G_LED
R_LED
RIMOCON
STBY5V
D_15V
SRQ
SCL0A
SDA0A
SCL0B
SDA0B
SCL1
SDA1
R1554
SCL2
SDA2
R1555
R1461
AGC2_SD_RXD
AGC1_SD_TXD
R1462
DTV_SCL0B
DTV_SDA0B
AGC2_SD_RXD
AGC1_SD_TXD
R_LED_STBY_LED
G_LED_POWER
RM_IN
KEY1
AI_SENSOR
R1212
KEY3_KEY_EDGE
PSM_LEDR_AFC1_KEY2
AFC2_AFT2_SUB-MUTE
R1490
TP1114
SUB3.3V
R1427
C1230 16V 47u
MAIN_Y
SL
SR
BT30V
MAIN_Y/CVBS
MAIN_PB/C
MAIN_PR
RGB_CVBS
RGB_FB
SUB_Y
SUB_PB
SUB_PR
PC_R
PC_G
PC_B
PC_HS
PC_VS
BS_Y(V)
*R4891
*JS4103
BS_SR
BS_SL
MAIN_R
MAIN_L
HDMI_R
HDMI_L
AD_DAT
AD_LRCK
AD_BICK
SCL0B
SDA0B
QLINK_AV2
QLINK_AV3
*R1383
*R1382
QLINK_IN1_(MAIN_SW1)
QLINK_IN2_(MAIN_SW2)
STBY3.3V
R1377
AUDIO_MUTE
SP_MUTE
A_MON_MUTE_MSP_RESET
RST
SOUND_SOS
TP1120
STBY5V
SOS
DG1
TO H-BOARD (H1)
SL_GND
SR_GND
DG20
TO PA-BOARD (PA20)
SR
SL
SOUND_SOS
SOS
TUNER_SUB_ON
TV_SUB_ON
TV_MAIN_ON
R1333 100
ODU_ON/OFF
SDA1(Main3.3V)
SCL1(Main3.3V)
TP1117
MAIN1.8V
R1430
C1228 16V 47u
TP1113
MAIN3.3V
R1474
C1229 16V 47u
R1426
FAN_SOS
FAN_MAX
R1352 47k
*D1117 B0BC3R5A0163
*R1351 100
*R1354 100
TP1119
MAIN5V
R1432
C1231 16V 47u
TP1118
C1232 16V 47u
SUB5V
R1431
MAIN9V
TP1116
R1429
C1233 16V 47u
TP1115
SUB9V
R1428
C1234 16V 47u
51
52
55
56
57
58
59
60

TH-50PV60A DG-Board (3 of 8) Schematic Diagram

23
24
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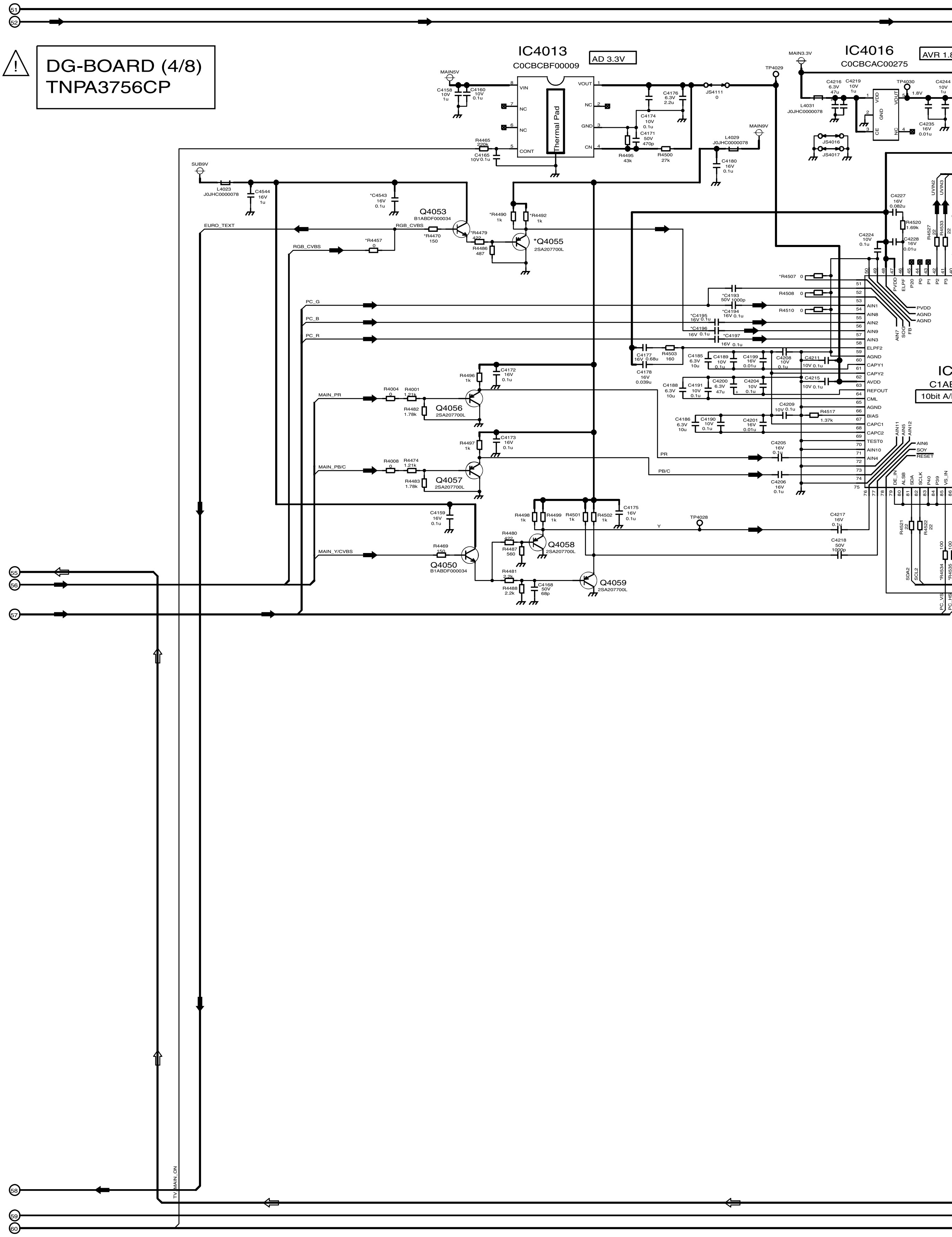
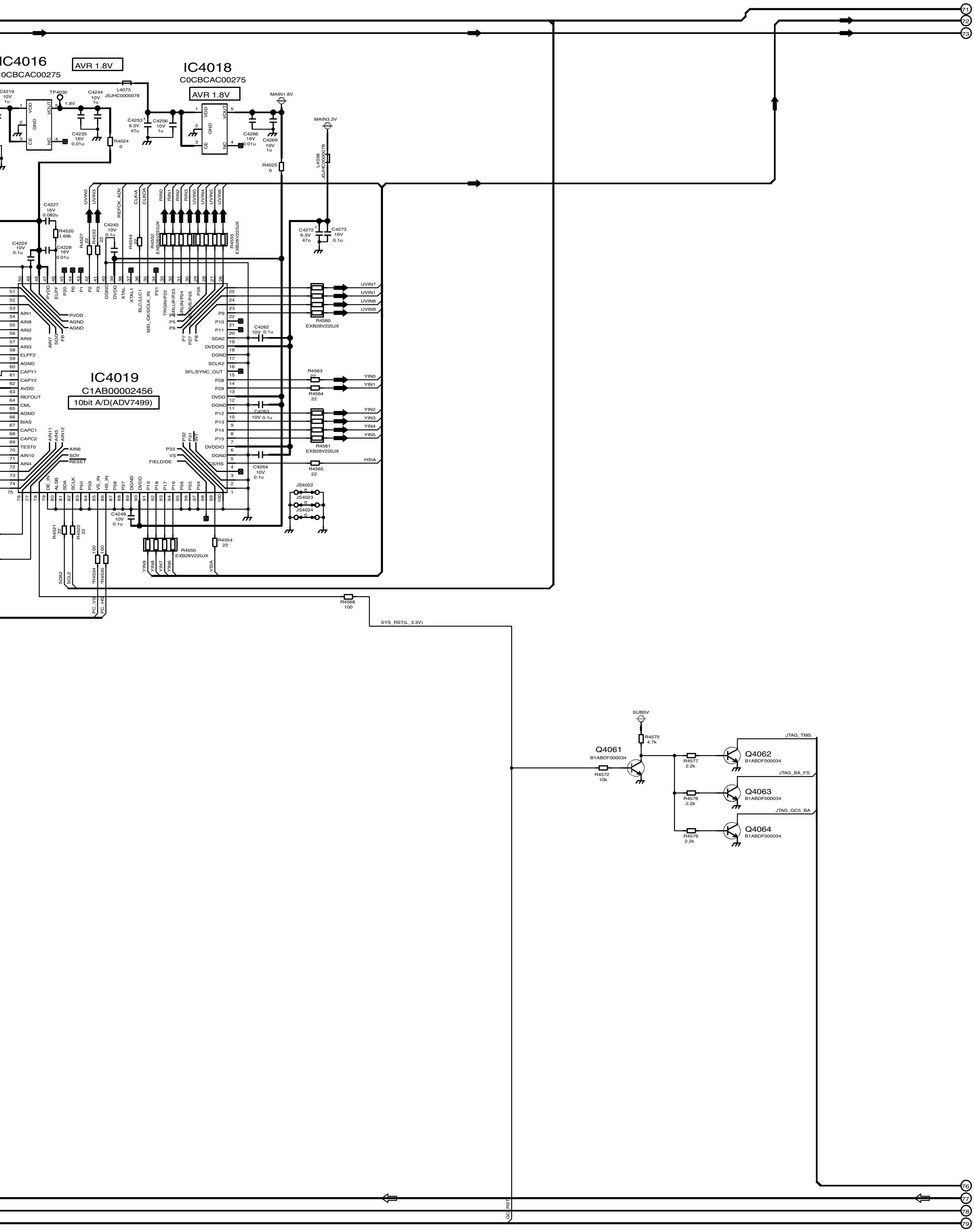
27

14.23. DG-Board (4 of 8) Schematic Diagram


DG-BOARD (4/8)
TNPA3756CP
IC4013
C0CBCBF00009
AD 3.3V
Thermal Pad
VIN
NC
NC
CONT
VOUT
NC
GND
CN
MAIN5V
SUB9V
MAIN9V
MAIN3.3V
IC4016
C0CBCAC00275
AVR 1.8
TP4029
TP4030
1.8V
L4031
J0JHC0000078
L4029
J0JHC0000078
L4023
J0JHC0000078
JS4111
JS4016
JS4017
Q4053
B1ABDF000034
Q4055
2SA207700L
Q4056
2SA207700L
Q4057
2SA207700L
Q4058
2SA207700L
Q4059
2SA207700L
Q4050
B1ABDF000034
EURO_TEXT
RGB_CVBS
PC_G
PC_B
PC_R
MAIN_PR
MAIN_PB/C
MAIN_Y/CVBS
PR
PB/C
Y
TP4028
TV_MAIN_ON
IC
C1AE
10bit A/
PVDD
AGND
AIN1
AIN8
AIN2
AIN9
AIN3
ELPF2
CAPY1
CAPY2
AVDD
REFOUT
CML
BIAS
CAPC1
CAPC2
TEST0
AIN10
AIN4
AIN6
SOY
RESET
SDA2
SCL2
PC_VS
PC_HS
51
52
55
56
57
58
59
60

TH-50PV60A DG-Board (4 of 8) Schematic Diagram

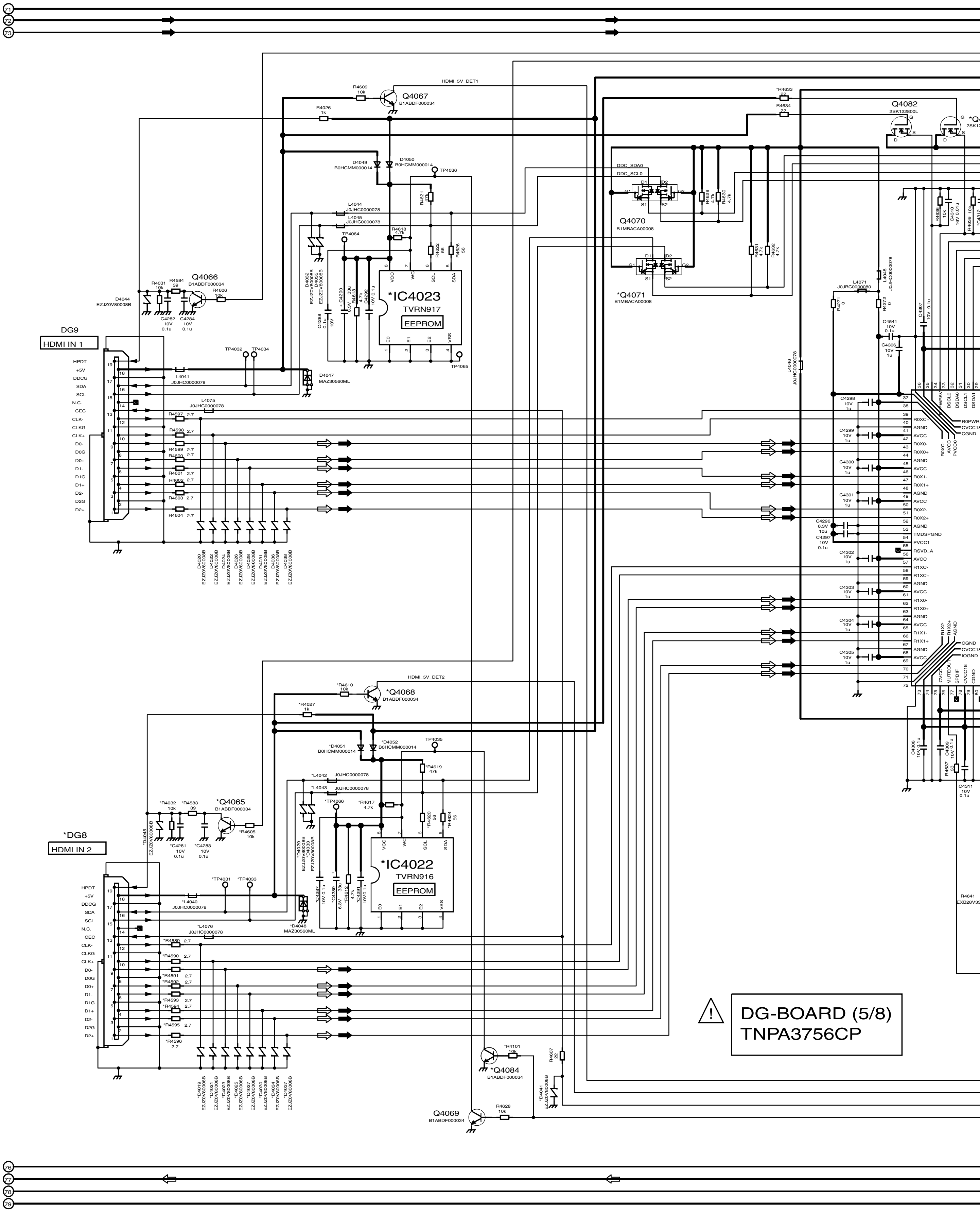
28 29 30 31 32


IC4016
C0CBCAC00275
AVR 1.8V
IC4018
C0CBCAC00275
AVR 1.8V
IC4019
C1AB00002456
10bit A/D(ADV7499)
L4073
J0JHC0000078
TP4030
1.8V
C4219
C4244
C4235
C4253
C4256
C4266
C4269
R4024
R4025
MAIN1.8V
MAIN3.3V
L4038
J0JHC0000078
C4227
C4224
C4228
R4520
R4527
R4533
C4245
R4544
R4552
R4555
C4272
C4273
UVIN7
UVIN1
UVIN8
UVIN9
R4560
EXB28V220JX
C4262
R4563
R4564
YIN0
YIN1
C4263
YIN2
YIN3
YIN4
YIN5
R4561
EXB28V220JX
HSIA
R4565
C4264
JS4022
JS4023
JS4024
C4248
R4521
R4522
R4534
R4535
R4550
EXB28V220JX
R4554
YIN9
YIN8
YIN7
YIN6
VSIA
SDA2
SCL2
PC_VS
PC_HS
R4568
100
SYS_RST(L_3.3V)
SUB5V
R4575
4.7k
Q4061
B1ABDF000034
R4572
10k
R4577
2.2k
R4578
2.2k
R4579
2.2k
Q4062
B1ABDF000034
Q4063
B1ABDF000034
Q4064
B1ABDF000034
JTAG_TMS
JTAG_BA_FS
JTAG_GC5_BA
GC_RST
71
72
73
76
77
78
79

TH-50PV60A DG-Board (4 of 8) Schematic Diagram

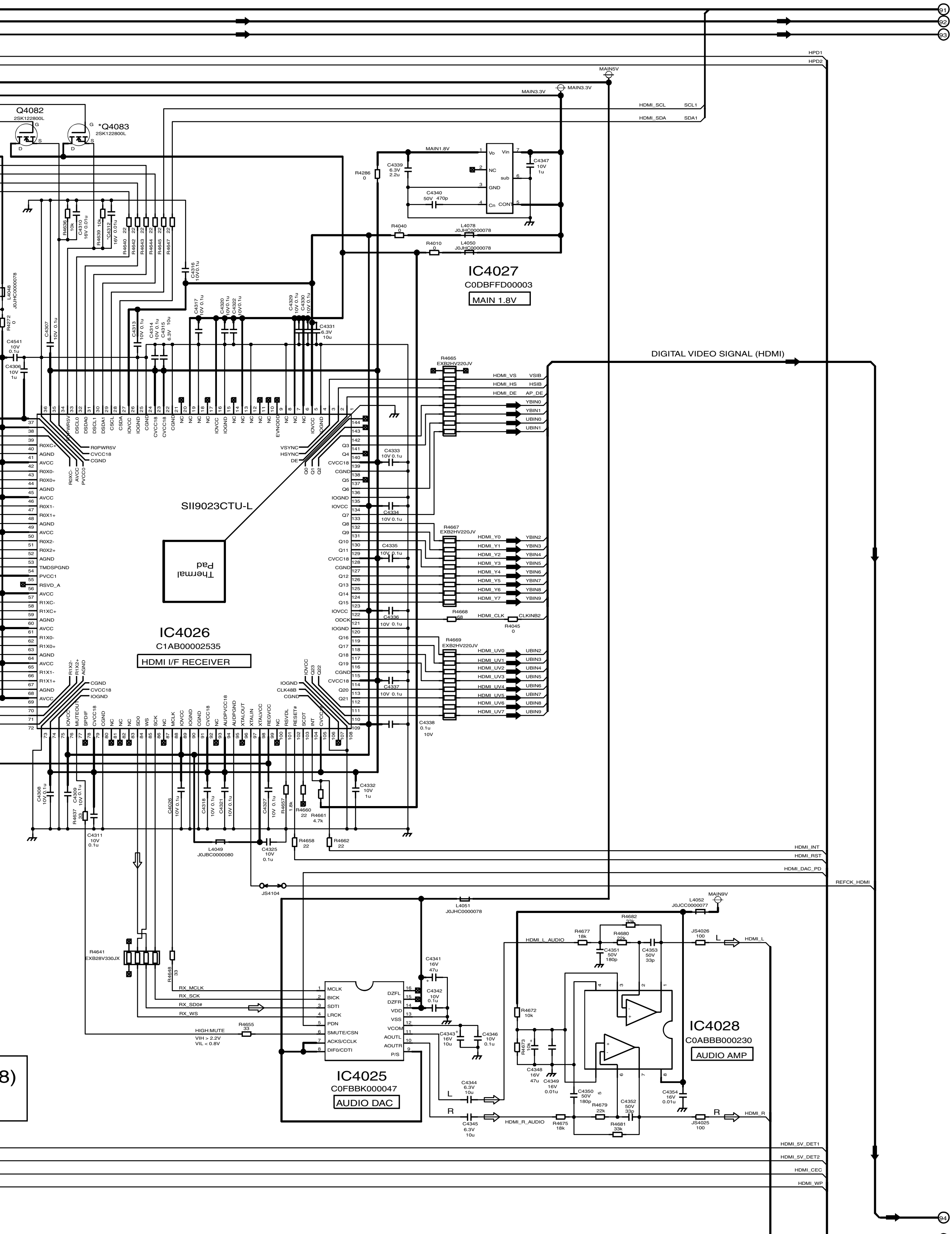
32 33 34 35 36

14.24. DG-Board (5 of 8) Schematic Diagram


71
72
73
HDMI_5V_DET1
Q4067
B1ABDF000034
R4609 10k
R4026 1k
D4049 B0HCMM000014
D4050 B0HCMM000014
TP4036
L4044 J0JHC0000078
L4045 J0JHC0000078
TP4064
R4618 4.7k
R4621 47k
R4622 56
R4626 56
*IC4023
TVRN917
EEPROM
VCC
WC
SCL
SDA
E0
E1
E2
VSS
TP4065
D4032 EZJZ0V80008B
D4035 EZJZ0V80008B
C4288 0.1u 10V
C4290 33u 6.3V
R4613 4.7k
C4292 10V 0.1u
Q4066
B1ABDF000034
R4031 10k
R4584 39
R4606 10k
D4044 EZJZ0V80008B
C4282 10V 0.1u
C4284 10V 0.1u
DG9
HDMI IN 1
HPDT
+5V
DDCG
SDA
SCL
N.C.
CEC
CLK-
CLKG
CLK+
D0-
D0G
D0+
D1-
D1G
D1+
D2-
D2G
D2+
TP4032
TP4034
L4041 J0JHC0000078
D4047 MAZ30560ML
L4075 J0JHC0000078
R4597 2.7
R4598 2.7
R4599 2.7
R4600 2.7
R4601 2.7
R4602 2.7
R4603 2.7
R4604 2.7
D4020 EZJZ0V80008B
D4022 EZJZ0V80008B
D4024 EZJZ0V80008B
D4026 EZJZ0V80008B
D4028 EZJZ0V80008B
D4031 EZJZ0V80008B
D4036 EZJZ0V80008B
D4038 EZJZ0V80008B
DDC_SDA0
DDC_SCL0
Q4070
B1MBACA00008
*Q4071
B1MBACA00008
R4629 4.7k
R4630 4.7k
R4631 4.7k
R4632 4.7k
*R4633 22
R4634 22
Q4082
2SK1228O0L
L4046 J0JHC0000078
L4071 J0JBC0000080
L4048 J0JHC0000078
R4271 0
R4272 0
C4541 10V 0.1u
C4306 10V 1u
C4307 10V 0.1u
R4636 10k
C4310 16V 0.01u
R4639 10k
C4298 10V 1u
C4299 10V 1u
C4300 10V 1u
C4301 10V 1u
C4296 6.3V 10u
C4297 10V 0.1u
C4302 10V 1u
C4303 10V 1u
C4304 10V 1u
C4305 10V 1u
R0XC-
AGND
AVCC
R0XC+
R0X0-
R0X0+
R0X1-
R0X1+
R0X2-
R0X2+
TMDSPGND
PVCC1
RSVD_A
R1XC-
R1XC+
R1X0-
R1X0+
R1X1-
R1X1+
R1X2-
R1X2+
CGND
CVCC18
IOGND
R0PWR5V
DSCL0
DSDA0
DSCL1
DSDA1
IOVCC
MUTEOUT
SPDIF
CVCC18
C4308 10V 0.1u
C4309 10V 0.1u
R4637 33
C4311 10V 0.1u
R4641 EXB28V33
HDMI_5V_DET2
*Q4068
B1ABDF000034
*R4610 10k
*R4027 1k
*D4051 B0HCMM000014
*D4052 B0HCMM000014
TP4035
*R4619 47k
*L4042 J0JHC0000078
*L4043 J0JHC0000078
*TP4066
*R4617 4.7k
*R4620 56
*R4624 56
*IC4022
TVRN916
EEPROM
*D4029 EZJZ0V80008B
*D4033 EZJZ0V80008B
*C4287 10V 0.1u
*C4289 6.3V 33u
*R4612 4.7k
*C4291 10V 0.1u
*Q4065
B1ABDF000034
*R4032 10k
*R4583 39
*R4605 10k
*D4045 EZJZ0V80008B
*C4281 10V 0.1u
*C4283 10V 0.1u
*DG8
HDMI IN 2
*TP4031
*TP4033
*L4040 J0JHC0000078
*D4048 MAZ30560ML
*L4076 J0JHC0000078
*R4589 2.7
*R4590 2.7
*R4591 2.7
*R4592 2.7
*R4593 2.7
*R4594 2.7
*R4595 2.7
*R4596 2.7
*D4019 EZJZ0V80008B
*D4021 EZJZ0V80008B
*D4023 EZJZ0V80008B
*D4025 EZJZ0V80008B
*D4027 EZJZ0V80008B
*D4030 EZJZ0V80008B
*D4034 EZJZ0V80008B
*D4037 EZJZ0V80008B
*R4101 10k
*Q4084
B1ABDF000034
R4607 22
*D4041 EZJZ0V80008B
Q4069
B1ABDF000034
R4628 10k
DG-BOARD (5/8)
TNPA3756CP
76
77
78
79

TH-50PV60A DG-Board (5 of 8) Schematic Diagram

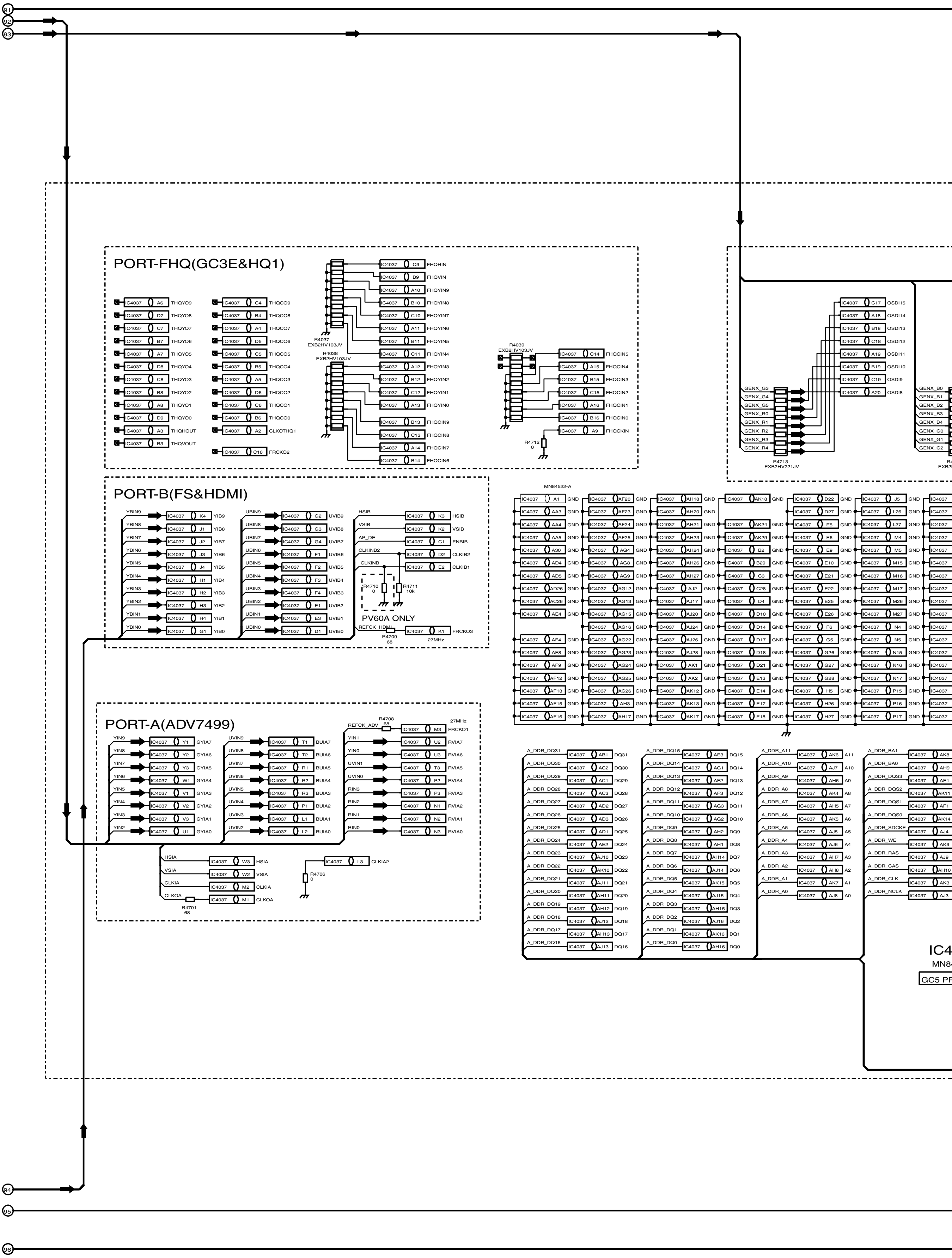
37 38 39 40 41


91
92
93
HPD1
HPD2
MAIN5V
MAIN3.3V
HDMI_SCL
SCL1
HDMI_SDA
SDA1
Q4082
2SK122800L
*Q4083
2SK122800L
MAIN1.8V
Vo
Vin
NC
sub
GND
Cn
CONT
C4339 6.3V 2.2u
C4340 50V 470p
C4347 10V 1u
R4286 0
R4040 0
R4010 0
L4078 J0JHC0000078
L4050 J0JHC0000078
IC4027
C0DBFFD00003
MAIN 1.8V
DIGITAL VIDEO SIGNAL (HDMI)
R4665 EXB2HV220JV
HDMI_VS
VSIB
HDMI_HS
HSIB
HDMI_DE
AP_DE
YBIN0
YBIN1
UBIN0
UBIN1
R4667 EXB2HV220JV
HDMI_Y0
HDMI_Y1
HDMI_Y2
HDMI_Y3
HDMI_Y4
HDMI_Y5
HDMI_Y6
HDMI_Y7
YBIN2
YBIN3
YBIN4
YBIN5
YBIN6
YBIN7
YBIN8
YBIN9
R4668 68
HDMI_CLK
CLKINB2
R4045 0
R4669 EXB2HV220JV
HDMI_UV0
HDMI_UV1
HDMI_UV2
HDMI_UV3
HDMI_UV4
HDMI_UV5
HDMI_UV6
HDMI_UV7
UBIN2
UBIN3
UBIN4
UBIN5
UBIN6
UBIN7
UBIN8
UBIN9
SII9023CTU-L
Thermal Pad
IC4026
C1AB00002535
HDMI I/F RECEIVER
C4333 10V 0.1u
C4334 10V 0.1u
C4335 10V 0.1u
C4336 10V 0.1u
C4337 10V 0.1u
C4338 0.1u 10V
C4332 10V 1u
R4660 22
R4661 4.7k
R4658 22
R4662 22
L4049 J0JBC0000080
C4325 10V 0.1u
JS4104
HDMI_INT
HDMI_RST
HDMI_DAC_PD
REFCK_HDMI
L4051 J0JHC0000078
R4641 EXB28V330JX
R4648 33
RX_MCLK
RX_SCK
RX_SD0#
RX_WS
HIGH:MUTE
VIH > 2.2V
VIL < 0.8V
R4655 33
MCLK
BICK
SDTI
LRCK
PDN
SMUTE/CSN
ACKS/CCLK
DIF0/CDTI
DZFL
DZFR
VDD
VSS
VCOM
AOUTL
AOUTR
P/S
C4341 16V 47u
C4342 10V 0.1u
C4343 16V 10u
C4346 10V 0.1u
IC4025
C0FBBK000047
AUDIO DAC
C4344 6.3V 10u
C4345 6.3V 10u
L
R
HDMI_L_AUDIO
HDMI_R_AUDIO
MAIN9V
L4052 J0JCC0000077
R4682 33k
R4677 18k
R4680 22k
C4351 50V 180p
C4353 50V 33p
JS4026 100
HDMI_L
R4672 10k
R4673 10k
C4348 16V 47u
C4349 16V 0.01u
C4350 50V 180p
R4679 22k
C4352 50V 33p
R4675 18k
R4681 33k
C4354 16V 0.01u
JS4025 100
HDMI_R
IC4028
C0ABBB000230
AUDIO AMP
HDMI_5V_DET1
HDMI_5V_DET2
HDMI_CEC
HDMI_WP
94
95
96
8)

TH-50PV60A DG-Board (5 of 8) Schematic Diagram

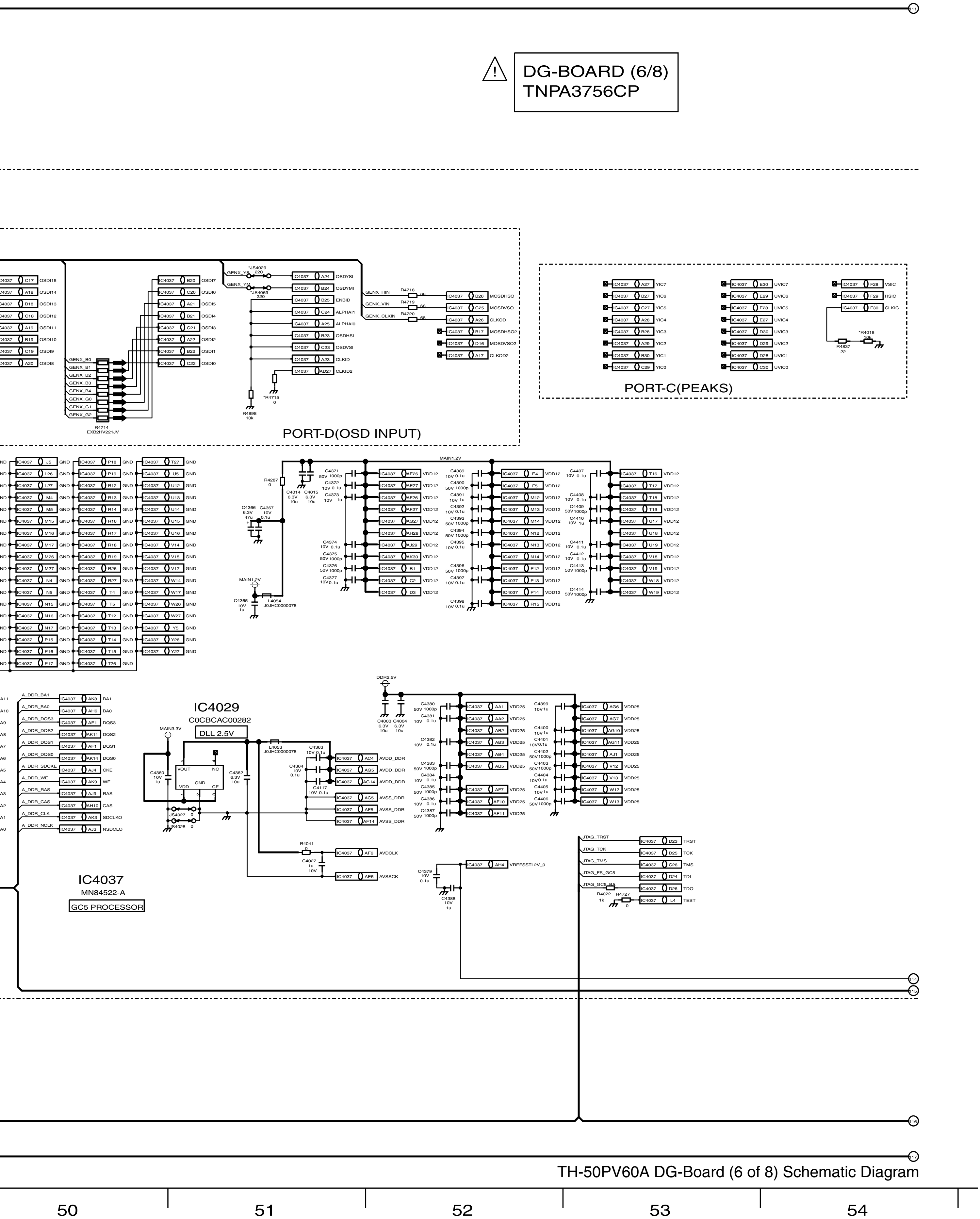
41 42 43 44 45

14.25. DG-Board (6 of 8) Schematic Diagram


91
92
93
PORT-FHQ(GC3E&HQ1)
R4037
EXB2HV103JV
R4038
EXB2HV103JV
R4039
EXB2HV103JV
R4712
0
R4713
EXB2HV221JV
PORT-B(FS&HDMI)
R4710
0
R4711
10k
PV60A ONLY
REFCK_HDMI
R4709
68
27MHz
PORT-A(ADV7499)
R4708
68
REFCK_ADV
27MHz
R4706
0
R4701
68
MN84522-A
IC4
MN8
GC5 PF
94
95
96

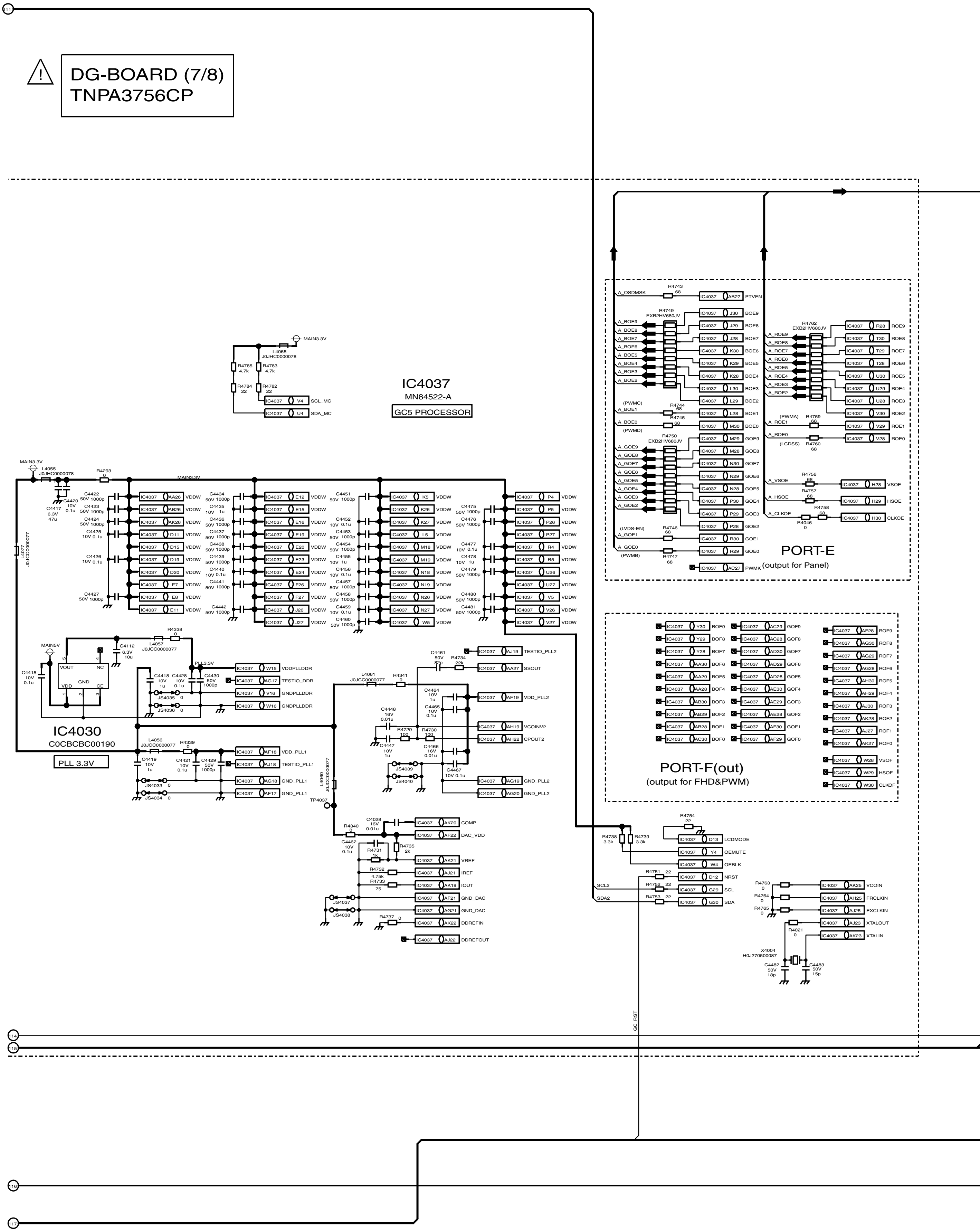
TH-50PV60A DG-Board (6 of 8) Schematic Diagram

46 47 48 49 50


DG-BOARD (6/8)
TNPA3756CP
PORT-D(OSD INPUT)
PORT-C(PEAKS)
R4714
EXB2HV221JV
MAIN1.2V
DDR2.5V
MAIN3.3V
IC4029
C0CBCAC00282
DLL 2.5V
L4053
J0JHC0000078
L4054
J0JHC0000078
IC4037
MN84522-A
GC5 PROCESSOR
VDD12
VDD25
AVDD_DDR
AVSS_DDR
AVDDCLK
AVSSCK
VREFSSTL2V_0
JTAG_TRST
JTAG_TCK
JTAG_TMS
JTAG_FS_GC5
JTAG_GC5_B4
TRST
TCK
TMS
TDI
TDO
TEST
50
51
52
53
54

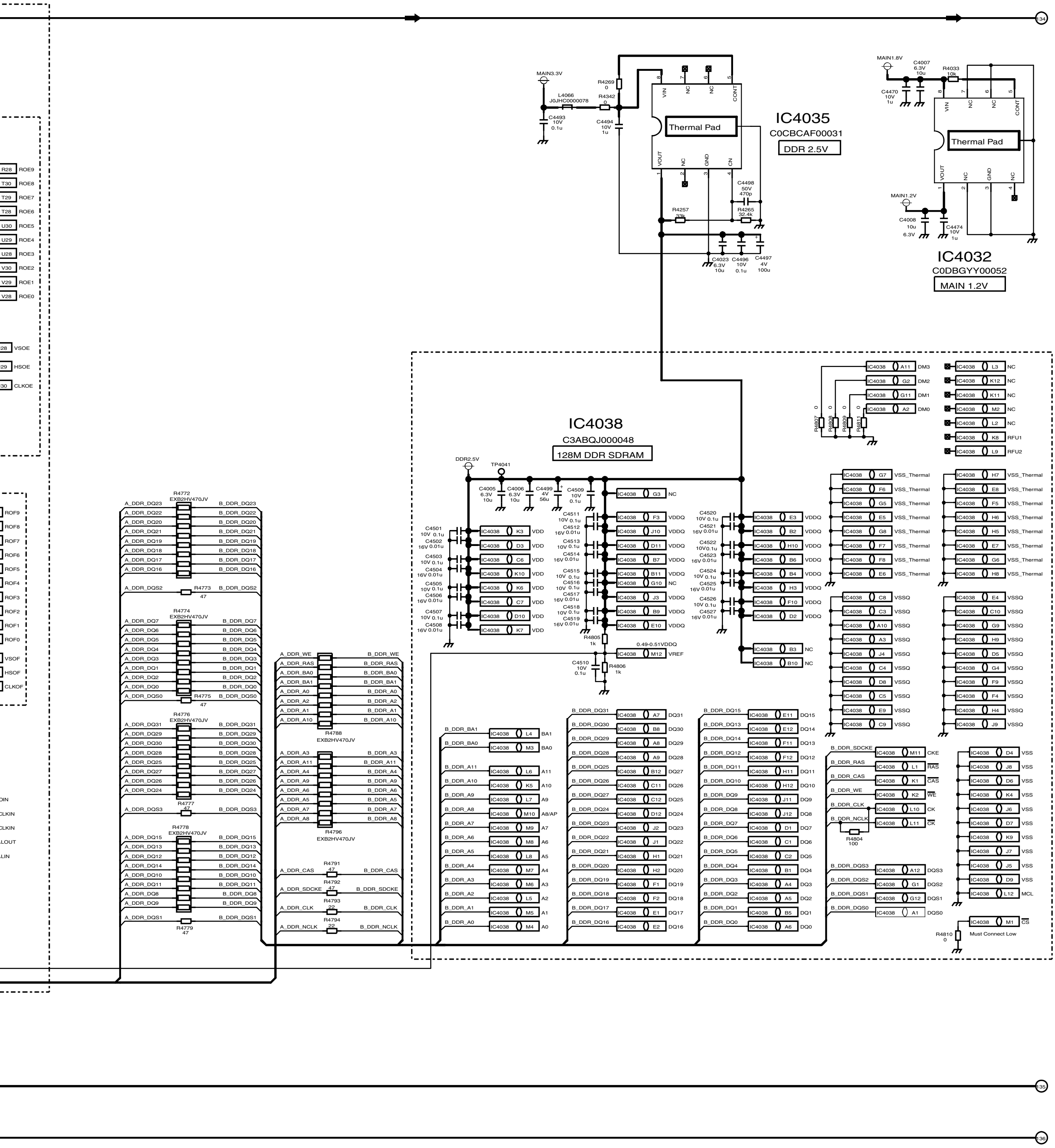
TH-50PV60A DG-Board (6 of 8) Schematic Diagram

14.26. DG-Board (7 of 8) Schematic Diagram



DG-BOARD (7/8)
TNPA3756CP
IC4037
MN84522-A
GC5 PROCESSOR
IC4030
C0CBCBC00190
PLL 3.3V
MAIN3.3V
MAIN5V
PLL3.3V
VOUT
NC
GND
VDD
CE
L4065 J0JHC0000078
L4055 J0JHC0000078
L4057 J0JCC0000077
L4056 J0JCC0000077
L4061 J0JCC0000077
L4060 J0JCC0000077
L4077 J0JCC0000077
SCL_MC
SDA_MC
VDDW
VDDPLLDDR
TESTIO_DDR
GNDPLLDDR
VDD_PLL1
TESTIO_PLL1
GND_PLL1
TESTIO_PLL2
SSOUT
VDD_PLL2
VCOINV2
CPOUT2
GND_PLL2
COMP
DAC_VDD
VREF
IREF
IOUT
GND_DAC
DDREFIN
DDREFOUT
TP4037
PORT-E
(output for Panel)
PTVEN
A_OSDMSK
BOE9
BOE8
BOE7
BOE6
BOE5
BOE4
BOE3
BOE2
BOE1
BOE0
GOE9
GOE8
GOE7
GOE6
GOE5
GOE4
GOE3
GOE2
GOE1
GOE0
ROE9
ROE8
ROE7
ROE6
ROE5
ROE4
ROE3
ROE2
ROE1
ROE0
VSOE
HSOE
CLKOE
PWMK
(PWMC)
(PWMD)
(PWMA)
(LCDSS)
(LVDS-EN)
(PWMB)
R4749 EXB2HV680JV
R4750 EXB2HV680JV
R4762 EXB2HV680JV
PORT-F(out)
(output for FHD&PWM)
BOF9
BOF8
BOF7
BOF6
BOF5
BOF4
BOF3
BOF2
BOF1
BOF0
GOF9
GOF8
GOF7
GOF6
GOF5
GOF4
GOF3
GOF2
GOF1
GOF0
ROF9
ROF8
ROF7
ROF6
ROF5
ROF4
ROF3
ROF2
ROF1
ROF0
VSOF
HSOF
CLKOF
LCDMODE
OEMUTE
OEBLK
NRST
SCL
SDA
SCL2
SDA2
GC_RST
VCOIN
FRCLKIN
EXCLKIN
XTALOUT
XTALIN
X4004
H0J270500087
111
114
115
116
117

TH-50PV60A DG-Board (7 of 8) Schematic Diagram

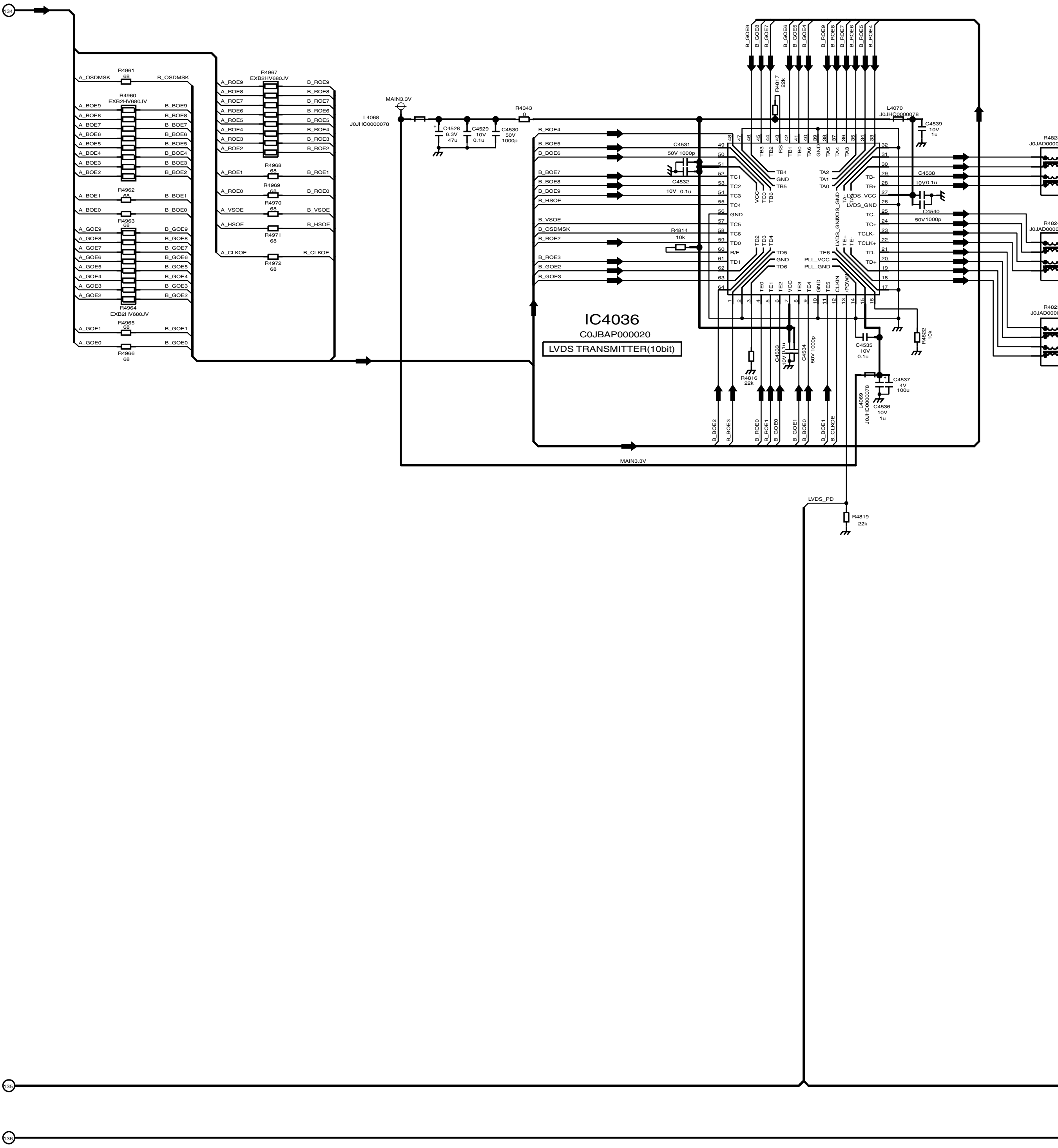

IC4035
C0CBCAF00031
DDR 2.5V
Thermal Pad
IC4032
C0DBGYY00052
MAIN 1.2V
IC4038
C3ABQJ000048
128M DDR SDRAM
MAIN3.3V
MAIN1.8V
MAIN1.2V
DDR2.5V
TP4041
L4066
J0JHC0000078
R4269
R4342
R4257
R4265
R4033
C4493
C4494
C4498
C4023
C4496
C4497
C4007
C4470
C4008
C4474
R4772
EXB2HV470JV
R4774
R4776
R4778
R4788
R4796
R4804
R4805
R4806
R4810
Must Connect Low
0.49-0.51VDDQ
VREF
A_DDR_WE
B_DDR_WE
A_DDR_CAS
B_DDR_CAS
A_DDR_SDCKE
B_DDR_SDCKE
A_DDR_CLK
B_DDR_CLK
A_DDR_NCLK
B_DDR_NCLK
134
135
136

TH-50PV60A DG-Board (7 of 8) Schematic Diagram

59 60 61 62 63

14.27. DG-Board (8 of 8) Schematic Diagram

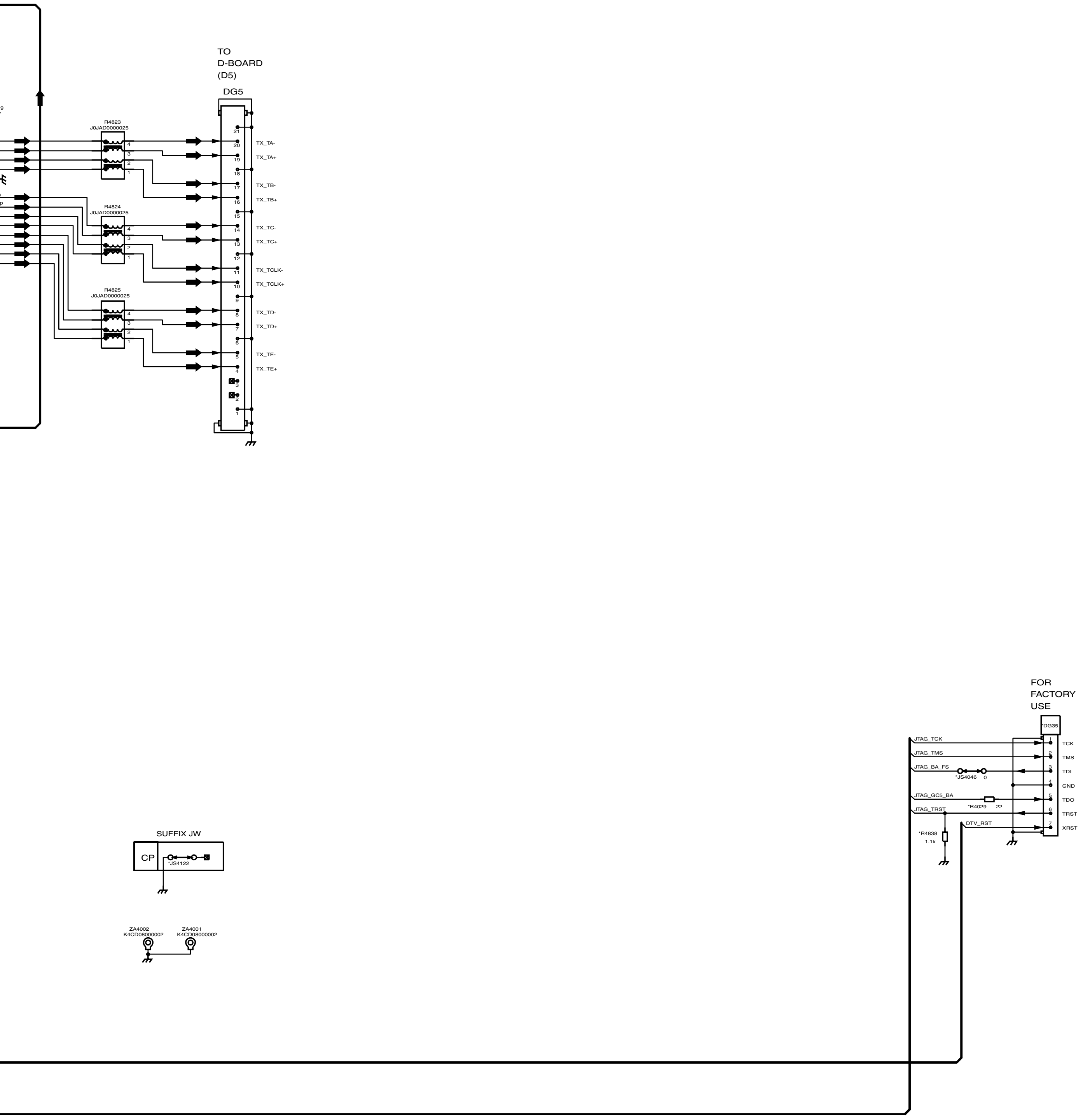
DG-BOARD (8/8)
TNPA3756CP



IC4036
C0JBAP000020
LVDS TRANSMITTER(10bit)
R4960 EXB2HV680JV
R4961 68
R4962 68
R4963 68
R4964 EXB2HV680JV
R4965 68
R4966 68
R4967 EXB2HV680JV
R4968 68
R4969 68
R4970 68
R4971 68
R4972 68
L4068 J0JHC0000078
MAIN3.3V
C4528 6.3V 47u
C4529 10V 0.1u
C4530 50V 1000p
R4343 0
C4531 50V 1000p
C4532 10V 0.1u
R4814 10k
R4816 22k
R4817 22k
L4070 J0JHC0000078
C4539 10V 1u
C4538 10V 0.1u
C4540 50V 1000p
C4533 10V 0.1u
C4534 50V 1000p
C4535 10V 0.1u
R4822 10k
C4537 4V 100u
L4069 J0JHC0000078
C4536 10V 1u
LVDS_PD
R4819 22k
A_OSDMSK
B_OSDMSK
A_CLKOE
B_CLKOE
A_VSOE
B_VSOE
A_HSOE
B_HSOE
134
135
136

TH-50PV60A DG-Board (8 of 8) Schematic Diagram

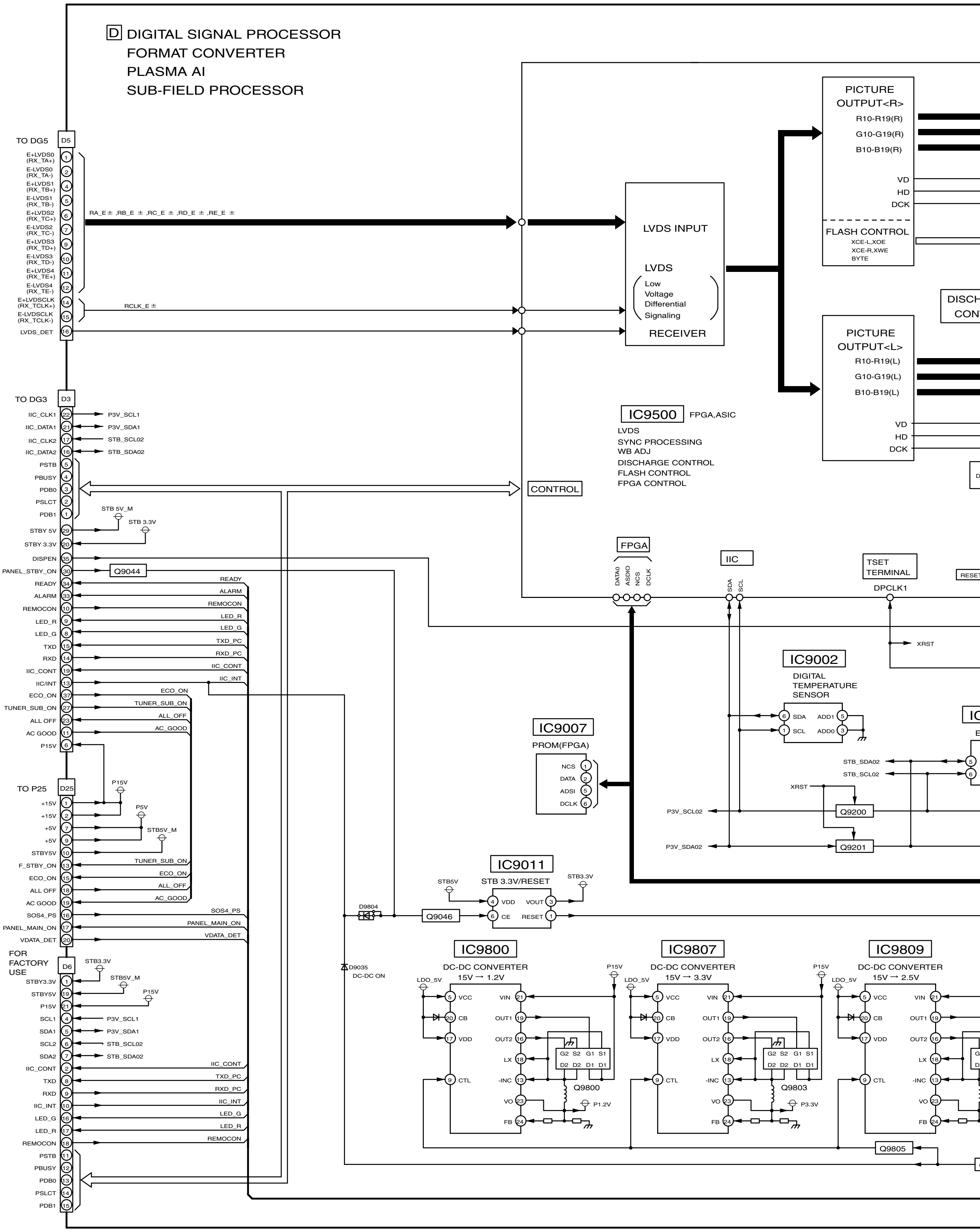
64 65 66 67 68

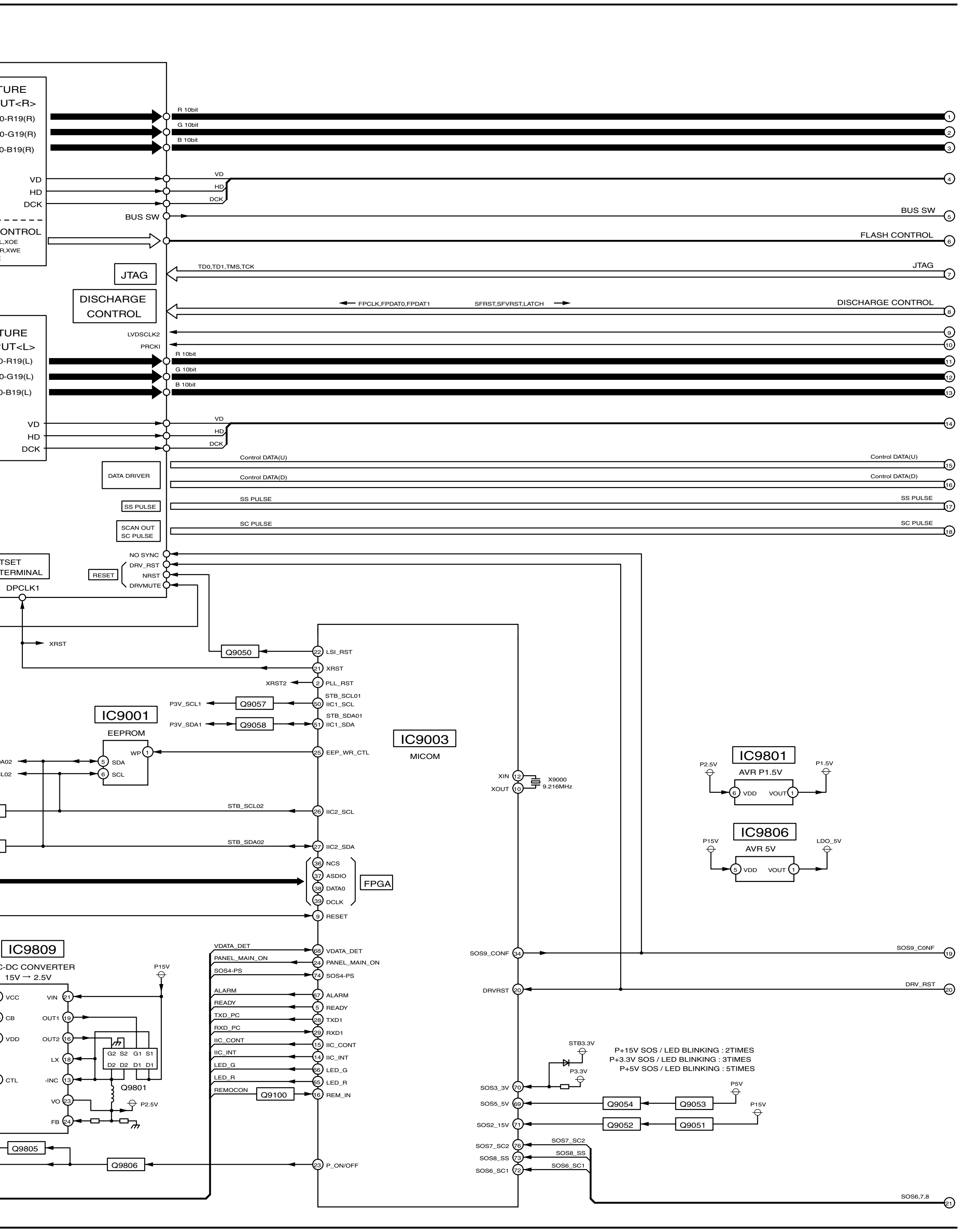

TO
D-BOARD
(D5)
DG5
R4823
J0JAD0000025
R4824
J0JAD0000025
R4825
J0JAD0000025
TX_TA-
TX_TA+
TX_TB-
TX_TB+
TX_TC-
TX_TC+
TX_TCLK-
TX_TCLK+
TX_TD-
TX_TD+
TX_TE-
TX_TE+
FOR
FACTORY
USE
*DG35
JTAG_TCK
JTAG_TMS
JTAG_BA_FS
*JS4046 0
JTAG_GC5_BA
*R4029 22
JTAG_TRST
*R4838
1.1k
DTV_RST
TCK
TMS
TDI
GND
TDO
TRST
XRST
SUFFIX JW
CP
*JS4122
ZA4002
K4CD08000002
ZA4001
K4CD08000002

TH-50PV60A DG-Board (8 of 8) Schematic Diagram

68 69 70 71 72

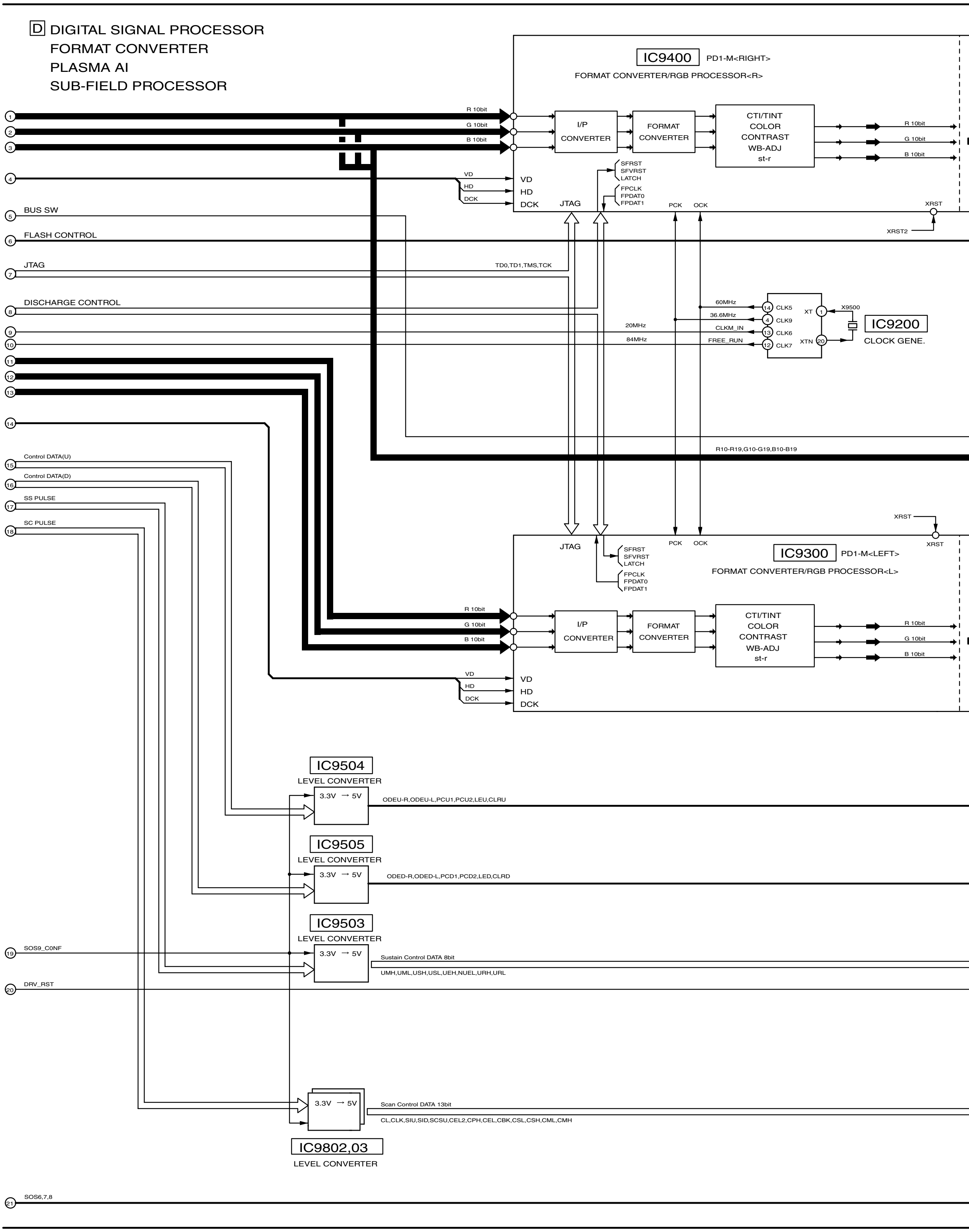
14.28. D-Board (1 of 2) Block Diagram

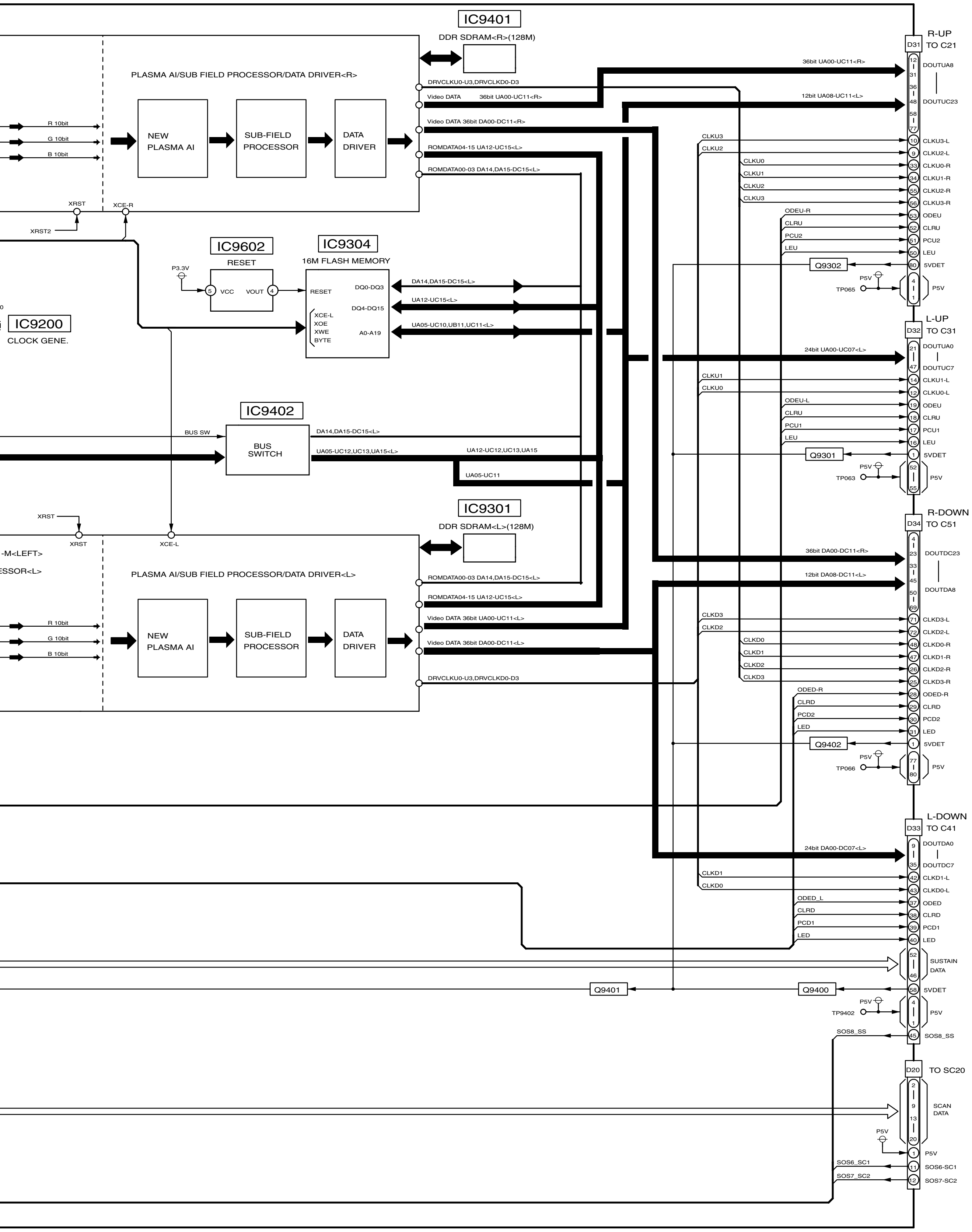

D DIGITAL SIGNAL PROCESSOR
FORMAT CONVERTER
PLASMA AI
SUB-FIELD PROCESSOR
TO DG5
D5
E+LVDS0 (RX_TA+)
E-LVDS0 (RX_TA-)
E+LVDS1 (RX_TB+)
E-LVDS1 (RX_TB-)
E+LVDS2 (RX_TC+)
E-LVDS2 (RX_TC-)
E+LVDS3 (RX_TD+)
E-LVDS3 (RX_TD-)
E+LVDS4 (RX_TE+)
E-LVDS4 (RX_TE-)
E+LVDSCLK (RX_TCLK+)
E-LVDSCLK (RX_TCLK-)
LVDS_DET
RA_E± ,RB_E ± ,RC_E ± ,RD_E ± ,RE_E ±
RCLK_E±
LVDS INPUT
LVDS
Low Voltage Differential Signaling
RECEIVER
PICTURE OUTPUT<R>
R10-R19(R)
G10-G19(R)
B10-B19(R)
VD
HD
DCK
FLASH CONTROL
XCE-L,XOE
XCE-R,XWE
BYTE
DISCH
CONT
PICTURE OUTPUT<L>
R10-R19(L)
G10-G19(L)
B10-B19(L)
VD
HD
DCK
IC9500
FPGA,ASIC
LVDS
SYNC PROCESSING
WB ADJ
DISCHARGE CONTROL
FLASH CONTROL
FPGA CONTROL
CONTROL
TO DG3
D3
IIC_CLK1
IIC_DATA1
IIC_CLK2
IIC_DATA2
PSTB
PBUSY
PDB0
PSLCT
PDB1
STBY 5V
STBY 3.3V
DISPEN
PANEL_STBY_ON
READY
ALARM
REMOCON
LED_R
LED_G
TXD
RXD
IIC_CONT
IIC/INT
ECO_ON
TUNER_SUB_ON
ALL OFF
AC GOOD
P15V
P3V_SCL1
P3V_SDA1
STB_SCL02
STB_SDA02
STB 5V_M
STB 3.3V
Q9044
READY
ALARM
REMOCON
LED_R
LED_G
TXD_PC
RXD_PC
IIC_CONT
IIC_INT
ECO_ON
TUNER_SUB_ON
ALL_OFF
AC_GOOD
FPGA
DATA0
ASDIO
NCS
DCLK
IIC
SDA
SCL
TSET TERMINAL
DPCLK1
RESET
XRST
IC9002
DIGITAL TEMPERATURE SENSOR
SDA
SCL
ADD1
ADD0
IC9007
PROM(FPGA)
NCS
DATA
ADSI
DCLK
STB_SDA02
STB_SCL02
XRST
Q9200
Q9201
P3V_SCL02
P3V_SDA02
TO P25
D25
+15V
+15V
+5V
+5V
STBY5V
F_STBY_ON
ECO_ON
ALL OFF
AC GOOD
SOS4_PS
PANEL_MAIN_ON
VDATA_DET
P15V
P5V
STB5V_M
TUNER_SUB_ON
ECO_ON
ALL_OFF
AC_GOOD
SOS4_PS
PANEL_MAIN_ON
VDATA_DET
IC9011
STB 3.3V/RESET
STB5V
STB3.3V
VDD
VOUT
CE
RESET
D9804
Q9046
D9035
DC-DC ON
FOR FACTORY USE
D6
STB3.3V
STB5V_M
P15V
STBY3.3V
STBY5V
P15V
SCL1
SDA1
SCL2
SDA2
IIC_CONT
TXD
RXD
IIC_INT
LED_G
LED_R
REMOCON
PSTB
PBUSY
PDB0
PSLCT
PDB1
P3V_SCL1
P3V_SDA1
STB_SCL02
STB_SDA02
IIC_CONT
TXD_PC
RXD_PC
IIC_INT
LED_G
LED_R
REMOCON
IC9800
DC-DC CONVERTER
15V → 1.2V
LDO_5V
P15V
VCC
CB
VDD
CTL
VIN
OUT1
OUT2
LX
-INC
VO
FB
G2 S2 G1 S1
D2 D2 D1 D1
Q9800
P1.2V
IC9807
DC-DC CONVERTER
15V → 3.3V
LDO_5V
P15V
Q9803
P3.3V
IC9809
DC-DC CONVERTER
15V → 2.5V
LDO_5V
P15V
Q9805


R 10bit
G 10bit
B 10bit
VD
HD
DCK
BUS SW
FLASH CONTROL
JTAG
TD0,TD1,TMS,TCK
DISCHARGE CONTROL
FPCLK,FPDAT0,FPDAT1
SFRST,SFVRST,LATCH
LVDSCLK2
PRCKI
Control DATA(U)
Control DATA(D)
DATA DRIVER
SS PULSE
SCAN OUT
SC PULSE
NO SYNC
DRV_RST
NRST
DRVMUTE
RESET
DPCLK1
XRST
Q9050
LSI_RST
XRST2
PLL_RST
P3V_SCL1
Q9057
STB_SCL01
IIC1_SCL
P3V_SDA1
Q9058
STB_SDA01
IIC1_SDA
IC9001
EEPROM
SDA
SCL
WP
EEP_WR_CTL
IC9003
MICOM
XIN
XOUT
X9000
9.216MHz
STB_SCL02
IIC2_SCL
STB_SDA02
IIC2_SDA
NCS
ASDIO
DATA0
DCLK
FPGA
IC9801
AVR P1.5V
P2.5V
P1.5V
VDD
VOUT
IC9806
AVR 5V
P15V
LDO_5V
IC9809
DC-DC CONVERTER
15V → 2.5V
VCC
CB
VDD
CTL
VIN
OUT1
OUT2
LX
-INC
VO
FB
Q9801
P2.5V
VDATA_DET
PANEL_MAIN_ON
SOS4-PS
ALARM
READY
TXD_PC
TXD1
RXD_PC
RXD1
IIC_CONT
IIC_INT
LED_G
LED_R
REMOCON
Q9100
REM_IN
Q9805
Q9806
P_ON/OFF
SOS9_CONF
DRVRST
DRV_RST
STB3.3V
P3.3V
P+15V SOS / LED BLINKING : 2TIMES
P+3.3V SOS / LED BLINKING : 3TIMES
P+5V SOS / LED BLINKING : 5TIMES
SOS3_3V
SOS5_5V
Q9054
Q9053
P5V
SOS2_15V
Q9052
Q9051
SOS7_SC2
SOS8_SS
SOS6_SC1
SOS6,7,8

TH-50PV60A
D-Board (1 of 2) Block Diagram

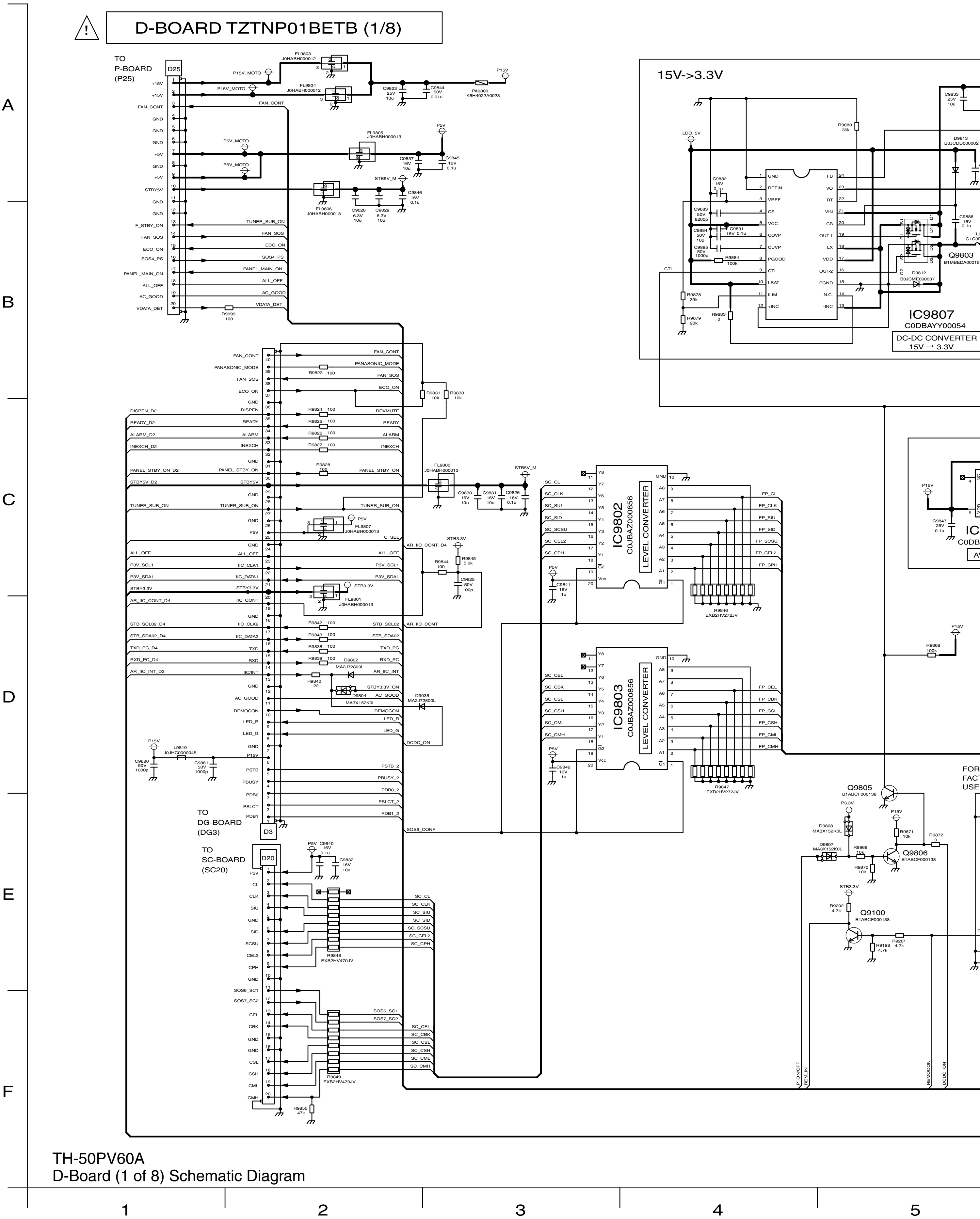
14.29. D-Board (2 of 2) Block Diagram


D DIGITAL SIGNAL PROCESSOR
FORMAT CONVERTER
PLASMA AI
SUB-FIELD PROCESSOR
IC9400
PD1-M<RIGHT>
FORMAT CONVERTER/RGB PROCESSOR<R>
R 10bit
G 10bit
B 10bit
I/P CONVERTER
FORMAT CONVERTER
CTI/TINT
COLOR
CONTRAST
WB-ADJ
st-r
SFRST
SFVRST
LATCH
FPCLK
FPDAT0
FPDAT1
VD
HD
DCK
JTAG
PCK
OCK
XRST
XRST2
1
2
3
4
5 BUS SW
6 FLASH CONTROL
7 JTAG
TD0,TD1,TMS,TCK
8 DISCHARGE CONTROL
9
10
11
12
13
14
20MHz
84MHz
60MHz
36.6MHz
CLKM_IN
FREE_RUN
14 CLK5
4 CLK9
13 CLK6
12 CLK7
XT 1
XTN 20
X9500
IC9200
CLOCK GENE.
R10-R19,G10-G19,B10-B19
15 Control DATA(U)
16 Control DATA(D)
17 SS PULSE
18 SC PULSE
IC9300
PD1-M<LEFT>
FORMAT CONVERTER/RGB PROCESSOR<L>
IC9504
LEVEL CONVERTER
3.3V → 5V
ODEU-R,ODEU-L,PCU1,PCU2,LEU,CLRU
IC9505
LEVEL CONVERTER
ODED-R,ODED-L,PCD1,PCD2,LED,CLRD
IC9503
LEVEL CONVERTER
19 SOS9_C0NF
Sustain Control DATA 8bit
UMH,UML,USH,USL,UEH,NUEL,URH,URL
20 DRV_RST
Scan Control DATA 13bit
CL,CLK,SIU,SID,SCSU,CEL2,CPH,CEL,CBK,CSL,CSH,CML,CMH
IC9802,03
LEVEL CONVERTER
21 SOS6,7,8

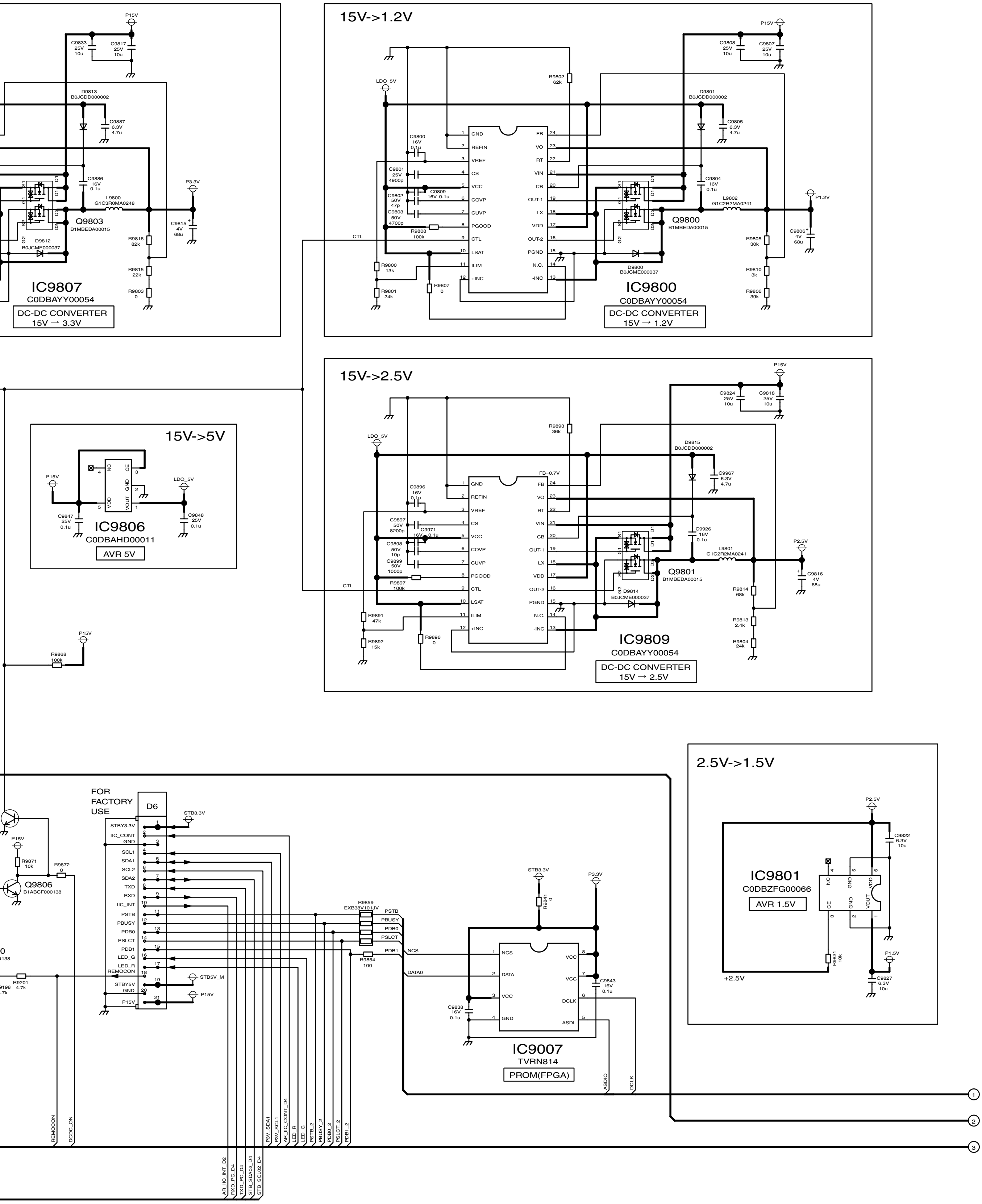

IC9401
DDR SDRAM<R>(128M)
PLASMA AI/SUB FIELD PROCESSOR/DATA DRIVER<R>
R 10bit
G 10bit
B 10bit
NEW PLASMA AI
SUB-FIELD PROCESSOR
DATA DRIVER
DRVCLKU0-U3,DRVCLKD0-D3
Video DATA 36bit UA00-UC11<R>
Video DATA 36bit DA00-DC11<R>
ROMDATA04-15 UA12-UC15<L>
ROMDATA00-03 DA14,DA15-DC15<L>
XRST
XCE-R
XRST2
IC9602
RESET
P3.3V
VCC
VOUT
IC9304
16M FLASH MEMORY
RESET
XCE-L
XOE
XWE
BYTE
DQ0-DQ3
DQ4-DQ15
A0-A19
DA14,DA15-DC15<L>
UA12-UC15<L>
UA05-UC10,UB11,UC11<L>
IC9200
CLOCK GENE.
IC9402
BUS SW
BUS SWITCH
DA14,DA15-DC15<L>
UA05-UC12,UC13,UA15<L>
UA12-UC12,UC13,UA15
UA05-UC11
IC9301
DDR SDRAM<L>(128M)
XRST
XCE-L
-M<LEFT>
ESSOR<L>
PLASMA AI/SUB FIELD PROCESSOR/DATA DRIVER<L>
R 10bit
G 10bit
B 10bit
NEW PLASMA AI
SUB-FIELD PROCESSOR
DATA DRIVER
ROMDATA00-03 DA14,DA15-DC15<L>
ROMDATA04-15 UA12-UC15<L>
Video DATA 36bit UA00-UC11<L>
Video DATA 36bit DA00-DC11<L>
DRVCLKU0-U3,DRVCLKD0-D3
36bit UA00-UC11<R>
12bit UA08-UC11<L>
CLKU3
CLKU2
CLKU0
CLKU1
CLKU2
CLKU3
ODEU-R
CLRU
PCU2
LEU
Q9302
P5V
TP065
R-UP
TO C21
D31
DOUTUA8
DOUTUC23
CLKU3-L
CLKU2-L
CLKU0-R
CLKU1-R
CLKU2-R
CLKU3-R
ODEU
CLRU
PCU2
LEU
5VDET
P5V
L-UP
TO C31
D32
24bit UA00-UC07<L>
DOUTUA0
DOUTUC7
CLKU1
CLKU0
CLKU1-L
CLKU0-L
ODEU-L
CLRU
PCU1
LEU
ODEU
CLRU
PCU1
LEU
Q9301
5VDET
P5V
TP063
P5V
R-DOWN
TO C51
D34
36bit DA00-DC11<R>
12bit DA08-DC11<L>
DOUTDC23
DOUTDA8
CLKD3
CLKD2
CLKD0
CLKD1
CLKD2
CLKD3
ODED-R
CLRD
PCD2
LED
CLKD3-L
CLKD2-L
CLKD0-R
CLKD1-R
CLKD2-R
CLKD3-R
ODED-R
CLRD
PCD2
LED
Q9402
5VDET
P5V
TP066
P5V
L-DOWN
TO C41
D33
24bit DA00-DC07<L>
DOUTDA0
DOUTDC7
CLKD1
CLKD0
CLKD1-L
CLKD0-L
ODED_L
CLRD
PCD1
LED
ODED
CLRD
PCD1
LED
SUSTAIN DATA
Q9401
Q9400
5VDET
P5V
TP9402
P5V
SOS8_SS
SOS8_SS
D20
TO SC20
SCAN DATA
P5V
P5V
SOS6_SC1
SOS7_SC2
SOS6-SC1
SOS7-SC2

TH-50PV60A
D-Board (2 of 2) Block Diagram

14.30. D-Board (1 of 8) Schematic Diagram


D-BOARD TZTNP01BETB (1/8)
TO P-BOARD (P25)
D25
+15V
FAN_CONT
GND
+5V
STBY5V
F_STBY_ON
FAN_SOS
ECO_ON
SOS4_PS
PANEL_MAIN_ON
ALL_OFF
AC_GOOD
VDATA_DET
P15V_MOTO
P5V_MOTO
STB5V_M
FL9803 J0HABH000012
FL9804 J0HABH000012
FL9805 J0HABH000013
FL9806 J0HABH000013
PA9800 K5H4022A0023
C9823 25V 10u
C9844 50V 0.01u
C9837 16V 10u
C9845 16V 0.1u
C9846 16V 0.1u
C9028 6.3V 10u
C9029 6.3V 10u
P15V
P5V
TUNER_SUB_ON
R9099 100
15V->3.3V
LDO_5V
R9880 36k
C9833 25V 10u
D9813 B0JCDD000002
C9882 16V 0.1u
C9883 50V 8200p
C9884 50V 10p
C9885 50V 1000p
C9891 16V 0.1u
R9884 100k
C9886 16V 0.1u
Q9803 B1MBEDA00015
D9812 B0JCME000037
CTL
R9878 39k
R9879 20k
R9883 0
GND
REFIN
VREF
CS
VCC
COVP
CUVP
PGOOD
CTL
LSAT
ILIM
+INC
FB
VO
RT
VIN
CB
OUT-1
LX
VDD
OUT-2
PGND
N.C.
-INC
IC9807
C0DBAYY00054
DC-DC CONVERTER 15V → 3.3V
FAN_CONT
PANASONIC_MODE
FAN_SOS
ECO_ON
DISPEN_D2
READY_D2
ALARM_D2
INEXCH_D2
PANEL_STBY_ON_D2
STBY5V_D2
TUNER_SUB_ON
ALL_OFF
P3V_SCL1
P3V_SDA1
STBY3.3V
AR_IIC_CONT_D4
STB_SCL02_D4
STB_SDA02_D4
TXD_PC_D4
RXD_PC_D4
AR_IIC_INT_D2
DRVMUTE
READY
ALARM
INEXCH
PANEL_STBY_ON
C_SEL
IIC_CLK1
IIC_DATA1
IIC_CONT
IIC_CLK2
IIC_DATA2
TXD
RXD
IIC/INT
REMOCON
LED_R
LED_G
PSTB
PBUSY
PDB0
PSLCT
PDB1
PSTB_2
PBUSY_2
PDB0_2
PSLCT_2
PDB1_2
SOS9_CONF
DCDC_ON
R9823 100
R9824 100
R9825 100
R9826 100
R9827 100
R9828 100
R9831 10k
R9830 10k
R9842 100
R9843 100
R9838 100
R9839 100
R9840 22
R9844 100
R9845 5.6k
C9825 50V 100p
FL9800 J0HABH000013
FL9807 J0HABH000013
FL9801 J0HABH000013
C9830 16V 10u
C9831 16V 10u
C9826 16V 0.1u
STB3.3V
STBY3.3V_ON
AR_IIC_CONT
AR_IIC_INT
D9802 MA2J72800L
D9804 MA3X152K0L
D9035 MA2J72800L
L9810 J0JHC0000045
C9880 50V 1000p
C9881 50V 1000p
TO DG-BOARD (DG3)
D3
TO SC-BOARD (SC20)
D20
C9840 16V 0.1u
C9832 16V 10u
SC_CL
SC_CLK
SC_SIU
SC_SID
SC_SCSU
SC_CEL2
SC_CPH
SC_CEL
SC_CBK
SC_CSL
SC_CSH
SC_CML
SC_CMH
SOS6_SC1
SOS7_SC2
R9848 EXB2HV470JV
R9849 EXB2HV470JV
R9850 47k
IC9802
C0JBAZ000856
LEVEL CONVERTER
IC9803
C0JBAZ000856
LEVEL CONVERTER
C9841 16V 1u
C9842 16V 1u
R9846 EXB2HV272JV
R9847 EXB2HV272JV
FP_CL
FP_CLK
FP_SIU
FP_SID
FP_SCSU
FP_CEL2
FP_CPH
FP_CEL
FP_CBK
FP_CSL
FP_CSH
FP_CML
FP_CMH
C9847 25V 0.1u
C0DB
R9868 100k
FOR FACT USE
Q9805 B1ABCF000138
P3.3V
D9808 MA3X152K0L
D9807 MA3X152K0L
R9871 10k
R9872 0
R9869 10k
R9870 10k
Q9806 B1ABCF000138
R9202 4.7k
Q9100 B1ABCF000138
R9201 4.7k
R9198 4.7k
P_ON/OFF
REM_IN
REMOCON
DCDC_ON
A
B
C
D
E
F
1
2
3
4
5

TH-50PV60A
D-Board (1 of 8) Schematic Diagram

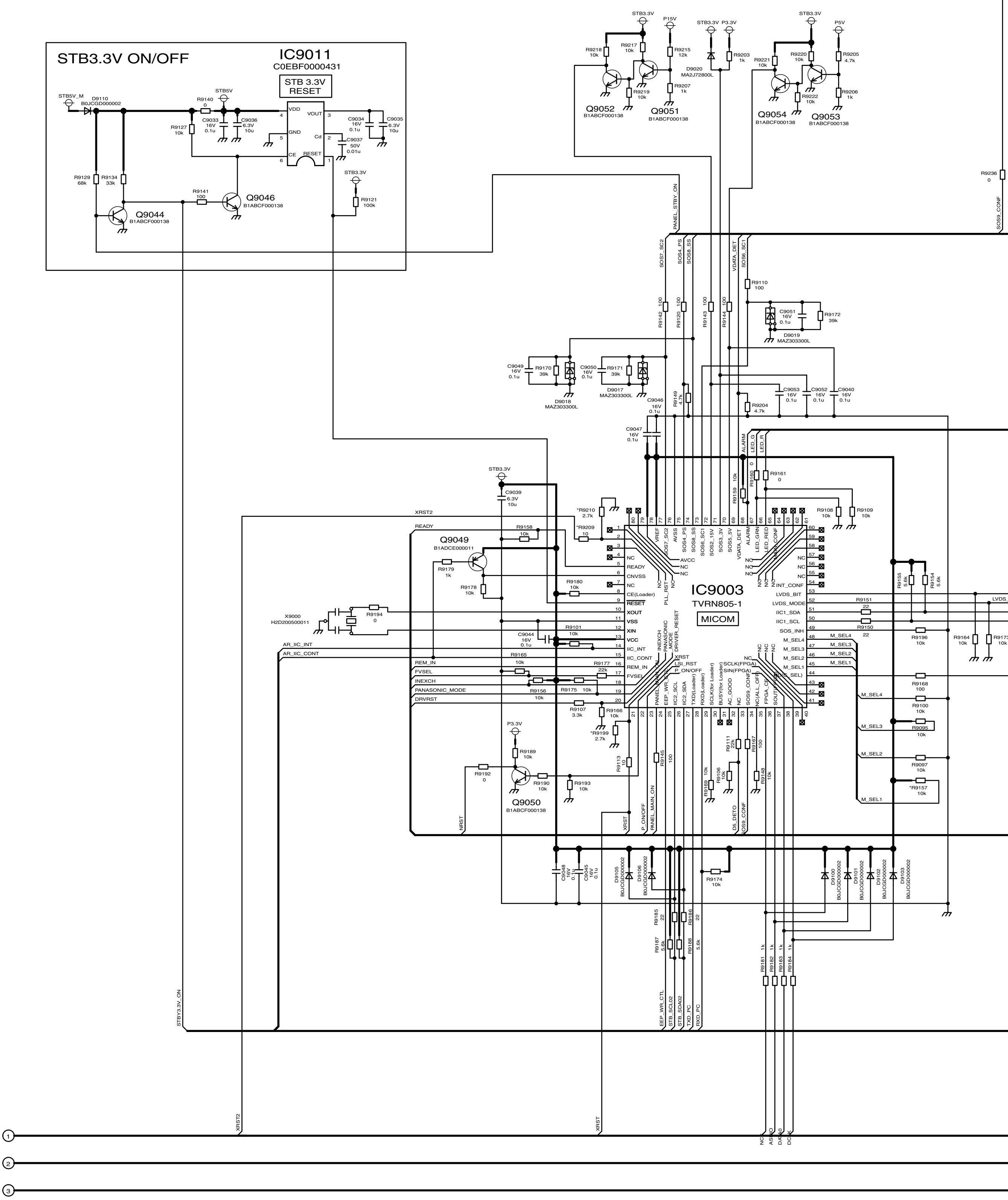

15V->1.2V
15V->2.5V
15V->5V
2.5V->1.5V
IC9807
C0DBAYY00054
DC-DC CONVERTER
15V → 3.3V
IC9800
C0DBAYY00054
DC-DC CONVERTER
15V → 1.2V
IC9809
C0DBAYY00054
DC-DC CONVERTER
15V → 2.5V
IC9806
C0DBAHD00011
AVR 5V
IC9801
C0DBZFG00066
AVR 1.5V
IC9007
TVRN814
PROM(FPGA)
Q9803
B1MBEDA00015
Q9800
B1MBEDA00015
Q9801
B1MBEDA00015
Q9806
B1ABCF000138
D6
FOR FACTORY USE
P15V
P3.3V
P1.2V
P2.5V
P1.5V
LDO_5V
STB3.3V
STB5V_M
CTL
GND
REFIN
VREF
CS
VCC
COVP
CUVP
PGOOD
LSAT
ILIM
+INC
FB
VO
RT
VIN
CB
OUT-1
LX
VDD
OUT-2
PGND
N.C.
-INC
FB=0.7V
STBY3.3V
IIC_CONT
SCL1
SDA1
SCL2
SDA2
TXD
RXD
IIC_INT
PSTB
PBUSY
PDB0
PSLCT
PDB1
LED_G
LED_R
REMOCON
STBY5V
NCS
DATA
DCLK
ASDI
DATA0
ASDIO
REMOCON
DCDC_ON
AR_IIC_INT_D2
RXD_PC_D4
TXD_PC_D4
STB_SDA02_D4
STB_SCL02_D4
P3V_SDA1
P3V_SCL1
AR_IIC_CONT_D4
LED_R
LED_G
PSTB_2
PBUSY_2
PDB0_2
PSLCT_2
PDB1_2
+2.5V
①
②
③

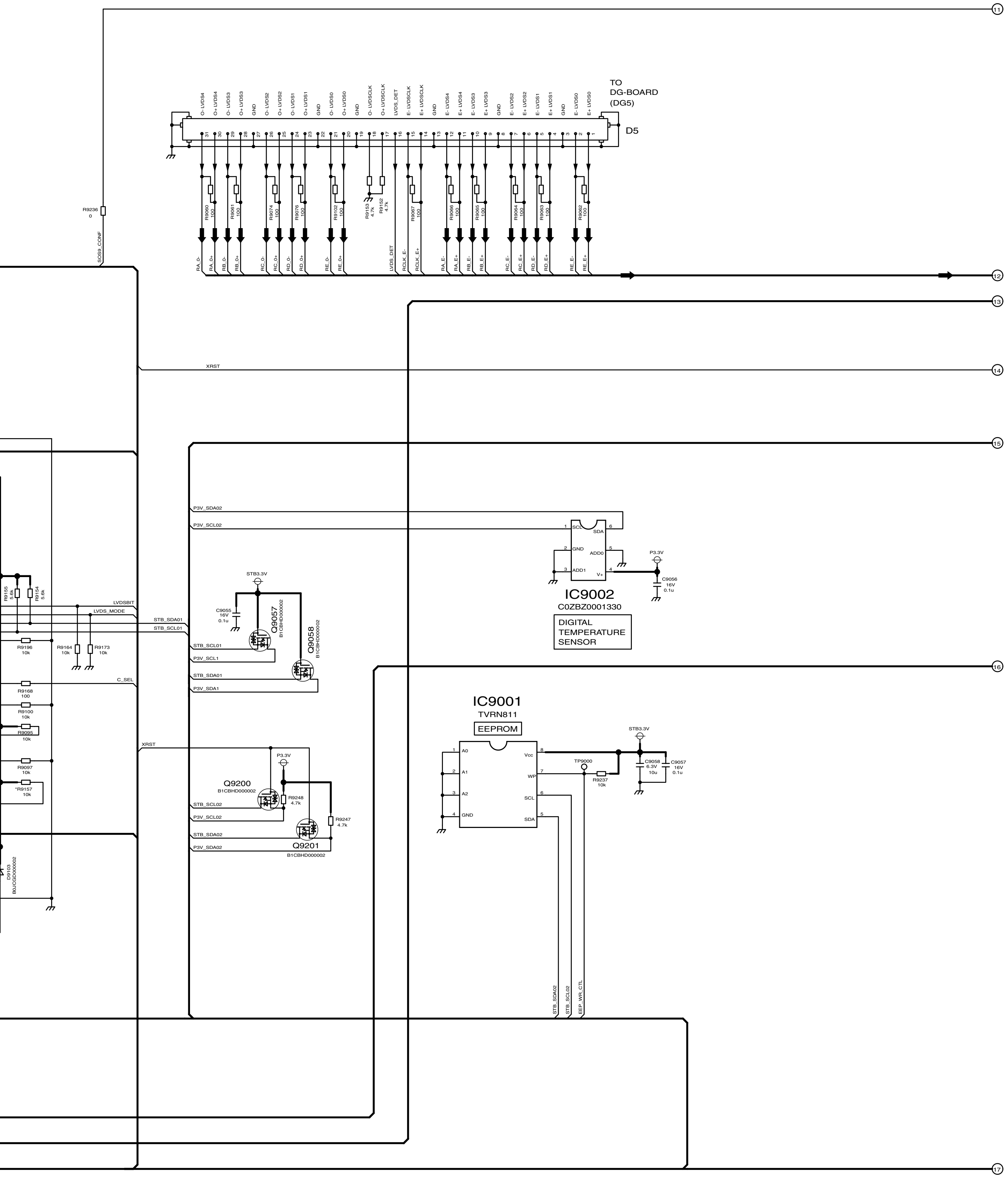
TH-50PV60A
D-Board (1 of 8) Schematic Diagram

5 6 7 8 9

14.31. D-Board (2 of 8) Schematic Diagram

D-BOARD TZTNP01BETB (2/8)

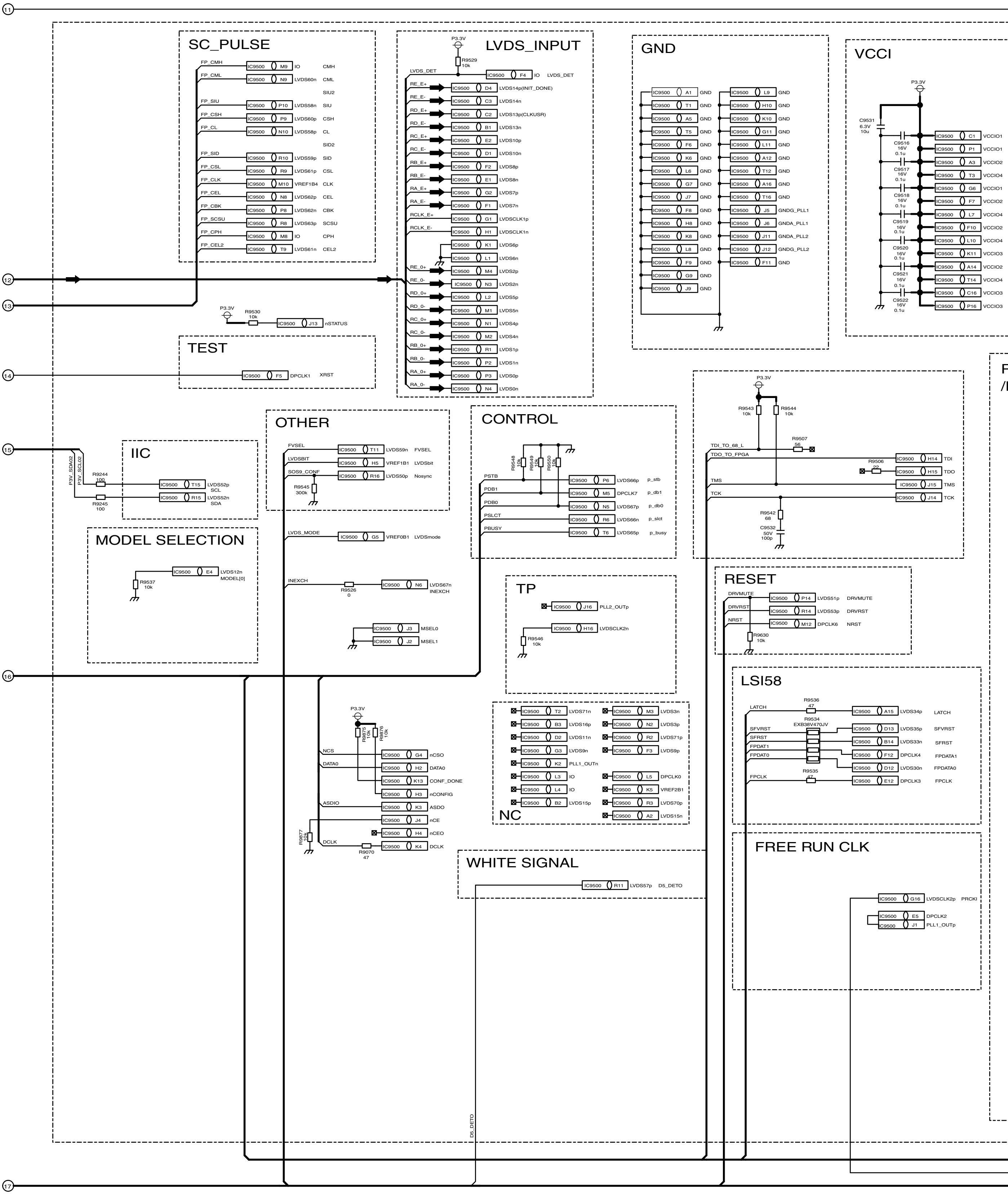

STB3.3V ON/OFF
IC9011
C0EBF0000431
STB 3.3V RESET
VDD
VOUT
GND
Cd
CE
RESET
D9110
B0JCGD000002
STB5V_M
STB5V
STB3.3V
P15V
P3.3V
P5V
Q9044
B1ABCF000138
Q9046
B1ABCF000138
Q9052
B1ABCF000138
Q9051
B1ABCF000138
Q9054
B1ABCF000138
Q9053
B1ABCF000138
D9020
MA2J72800L
D9017
MAZ303300L
D9018
MAZ303300L
D9019
MAZ303300L
Q9049
B1ADCE000011
Q9050
B1ABCF000138
X9000
H2D200500011
IC9003
TVRN805-1
MICOM
PANEL_STBY_ON
SOS9_CONF
XRST2
READY
AR_IIC_INT
AR_IIC_CONT
REM_IN
FVSEL
INEXCH
PANASONIC_MODE
DRVRST
STBY3.3V_ON
XRST
NRST
P_ON/OFF
PANEL_MAIN_ON
D5_DETO
EEP_WR_CTL
STB_SCL02
STB_SDA02
TXD_PC
RXD_PC
M_SEL1
M_SEL2
M_SEL3
M_SEL4
LVDS_


TO
DG-BOARD
(DG5)
D5
O- LVDS4
O+ LVDS4
O- LVDS3
O+ LVDS3
GND
O- LVDS2
O+ LVDS2
O- LVDS1
O+ LVDS1
O- LVDS0
O+ LVDS0
O- LVDSCLK
O+ LVDSCLK
LVDS_DET
E- LVDSCLK
E+ LVDSCLK
E- LVDS4
E+ LVDS4
E- LVDS3
E+ LVDS3
E- LVDS2
E+ LVDS2
E- LVDS1
E+ LVDS1
E- LVDS0
E+ LVDS0
R9236
0
SOS9_CONF
R9060 100
R9061 100
R9074 100
R9076 100
R9102 100
R9153 4.7k
R9152 4.7k
R9067 100
R9066 100
R9065 100
R9064 100
R9063 100
R9062 100
RA_0-
RA_0+
RB_0-
RB_0+
RC_0-
RC_0+
RD_0-
RD_0+
RE_0-
RE_0+
LVDS_DET
RCLK_E-
RCLK_E+
RA_E-
RA_E+
RB_E-
RB_E+
RC_E-
RC_E+
RD_E-
RD_E+
RE_E-
RE_E+
XRST
P3V_SDA02
P3V_SCL02
SCL
SDA
GND
ADD0
ADD1
V+
P3.3V
C9056
16V
0.1u
IC9002
C0ZBZ0001330
DIGITAL
TEMPERATURE
SENSOR
STB3.3V
C9055
16V
0.1u
Q9057
B1CBHD000002
Q9058
B1CBHD000002
R9155 5.6k
R9154 5.6k
LVDSBIT
LVDS_MODE
STB_SDA01
STB_SCL01
STB_SCL01
P3V_SCL1
STB_SDA01
P3V_SDA1
R9196 10k
R9164 10k
R9173 10k
C_SEL
R9168 100
R9100 10k
R9095 10k
R9097 10k
*R9157 10k
D9103
B0JCGD000002
IC9001
TVRN811
EEPROM
A0
A1
A2
GND
Vcc
WP
SCL
SDA
STB3.3V
TP9000
R9237 10k
C9058 6.3V 10u
C9057 16V 0.1u
Q9200
B1CBHD000002
R9248 4.7k
R9247 4.7k
STB_SCL02
P3V_SCL02
STB_SDA02
P3V_SDA02
Q9201
B1CBHD000002
STB_SDA02
STB_SCL02
EEP_WR_CTL
11
12
13
14
15
16
17

TH-50PV60A
D-Board (2 of 8) Schematic Diagram

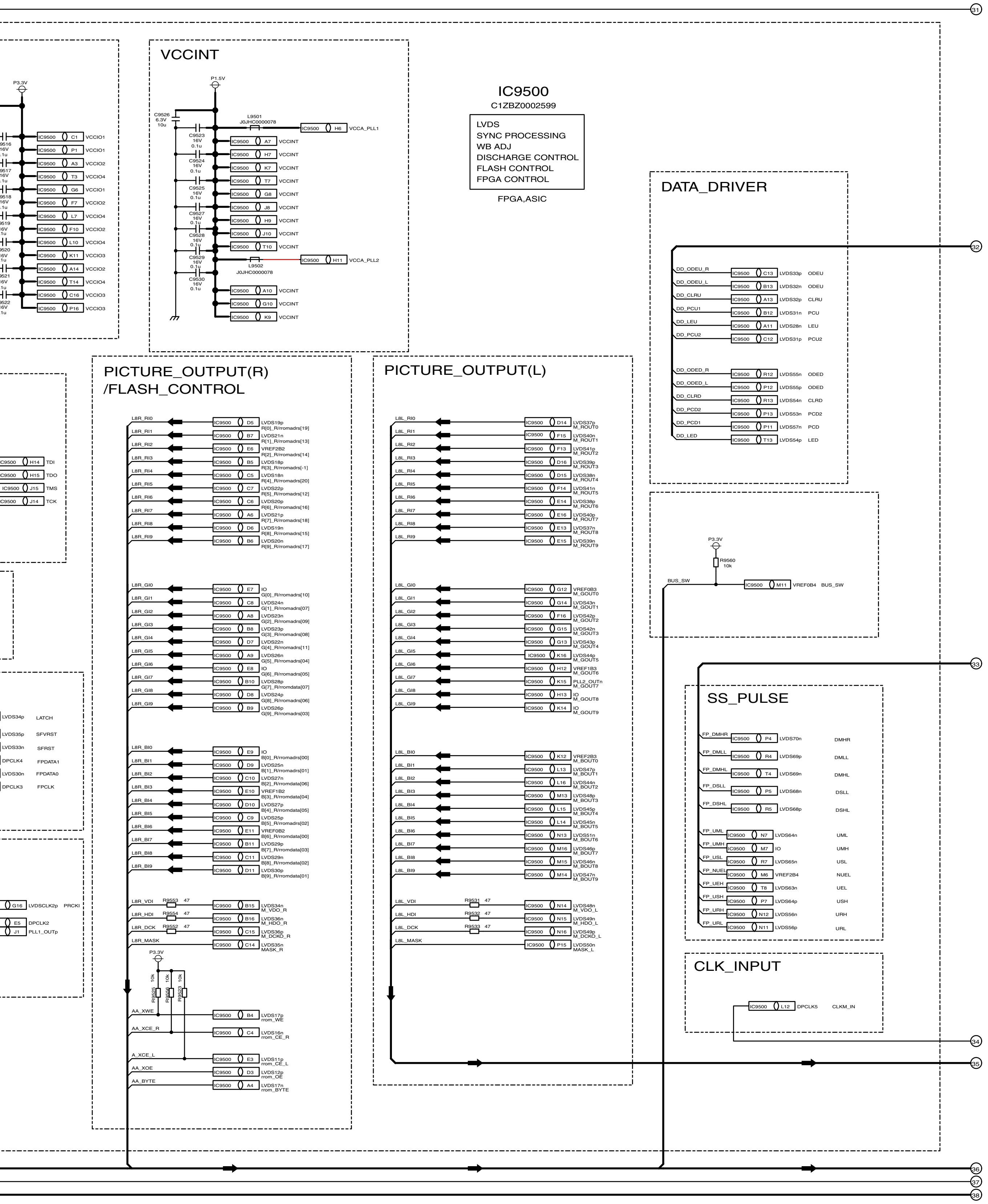
14 15 16 17 18

14.32. D-Board (3 of 8) Schematic Diagram


SC_PULSE
LVDS_INPUT
GND
VCCI
TEST
OTHER
CONTROL
IIC
MODEL SELECTION
TP
RESET
LSI58
NC
WHITE SIGNAL
FREE RUN CLK
IC9500
P3.3V
FP_CMH
FP_CML
FP_SIU
FP_CSH
FP_CL
FP_SID
FP_CSL
FP_CLK
FP_CEL
FP_CBK
FP_SCSU
FP_CPH
FP_CEL2
LVDS_DET
R9529 10k
R9530 10k
nSTATUS
DPCLK1
XRST
FVSEL
LVDSBIT
SOS9_CONF
LVDS_MODE
INEXCH
PSTB
PDB1
PDB0
PSLCT
PBUSY
TDI_TO_68_L
TDO_TO_FPGA
TMS
TCK
DRVMUTE
DRVRST
NRST
LATCH
SFVRST
SFRST
FPDAT1
FPDAT0
FPCLK
NCS
DATA0
ASDIO
DCLK
P3V_SDA02
P3V_SCL02
R9244 100
R9245 100
SCL
SDA
R9537 10k
D5_DETO
11
12
13
14
15
16
17

⚠ D-BOARD TZTNP01BETB (3/8)

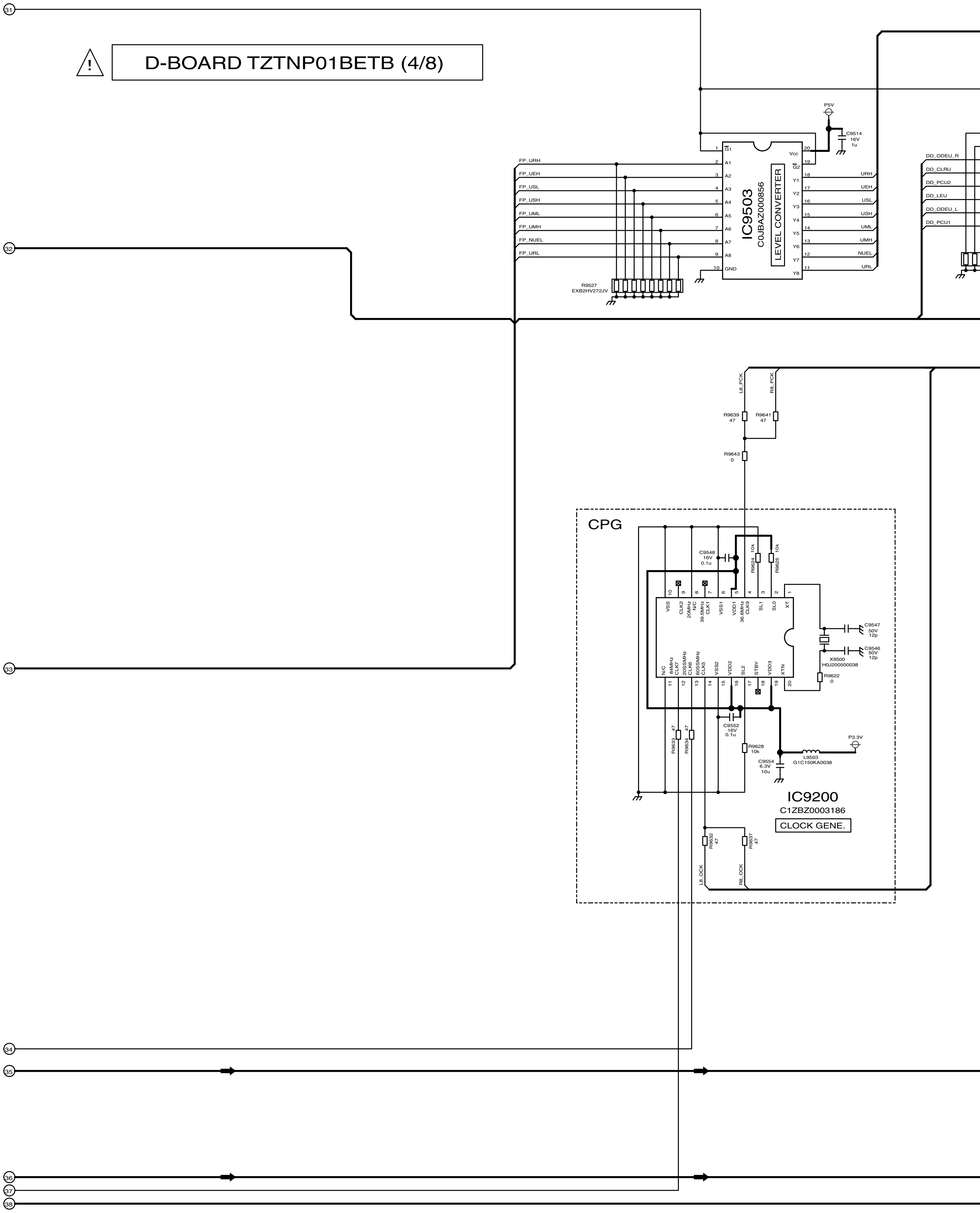
TH-50PV60A
D-Board (3 of 8) Schematic Diagram


VCCINT
IC9500
C1ZBZ0002599
LVDS
SYNC PROCESSING
WB ADJ
DISCHARGE CONTROL
FLASH CONTROL
FPGA CONTROL
FPGA,ASIC
DATA_DRIVER
PICTURE_OUTPUT(R)
/FLASH_CONTROL
PICTURE_OUTPUT(L)
SS_PULSE
CLK_INPUT
P3.3V
P1.5V
L9501
J0JHC0000078
L9502
J0JHC0000078
VCCA_PLL1
VCCA_PLL2
BUS_SW
R9560
10k
TDI
TDO
TMS
TCK
LATCH
SFVRST
SFRST
FPDATA1
FPDATA0
FPCLK
PRCKI
DPCLK5
CLKM_IN
31
32
33
34
35
36
37
38

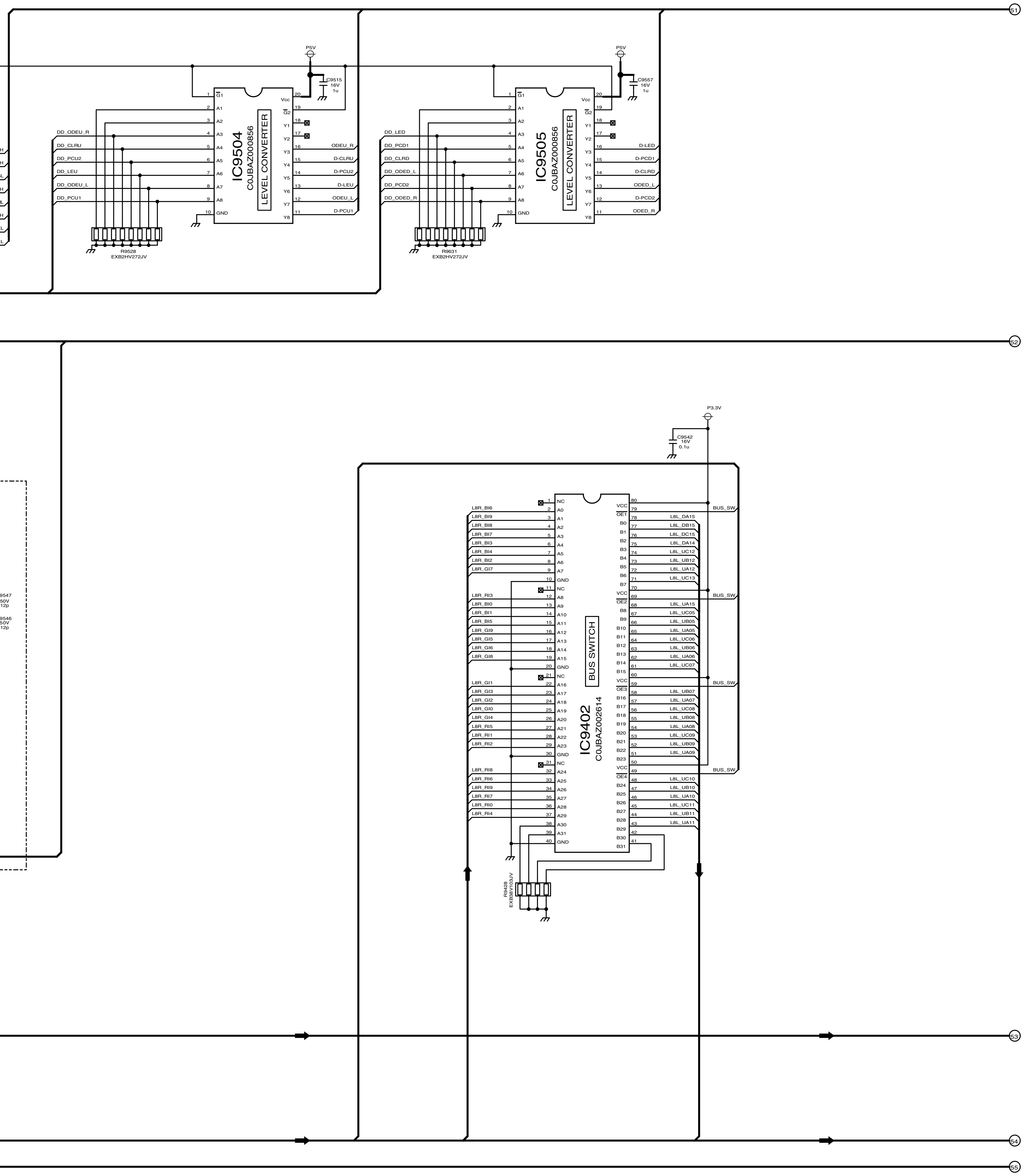
TH-50PV60A
D-Board (3 of 8) Schematic Diagram

23	24	25	26	27

14.33. D-Board (4 of 8) Schematic Diagram



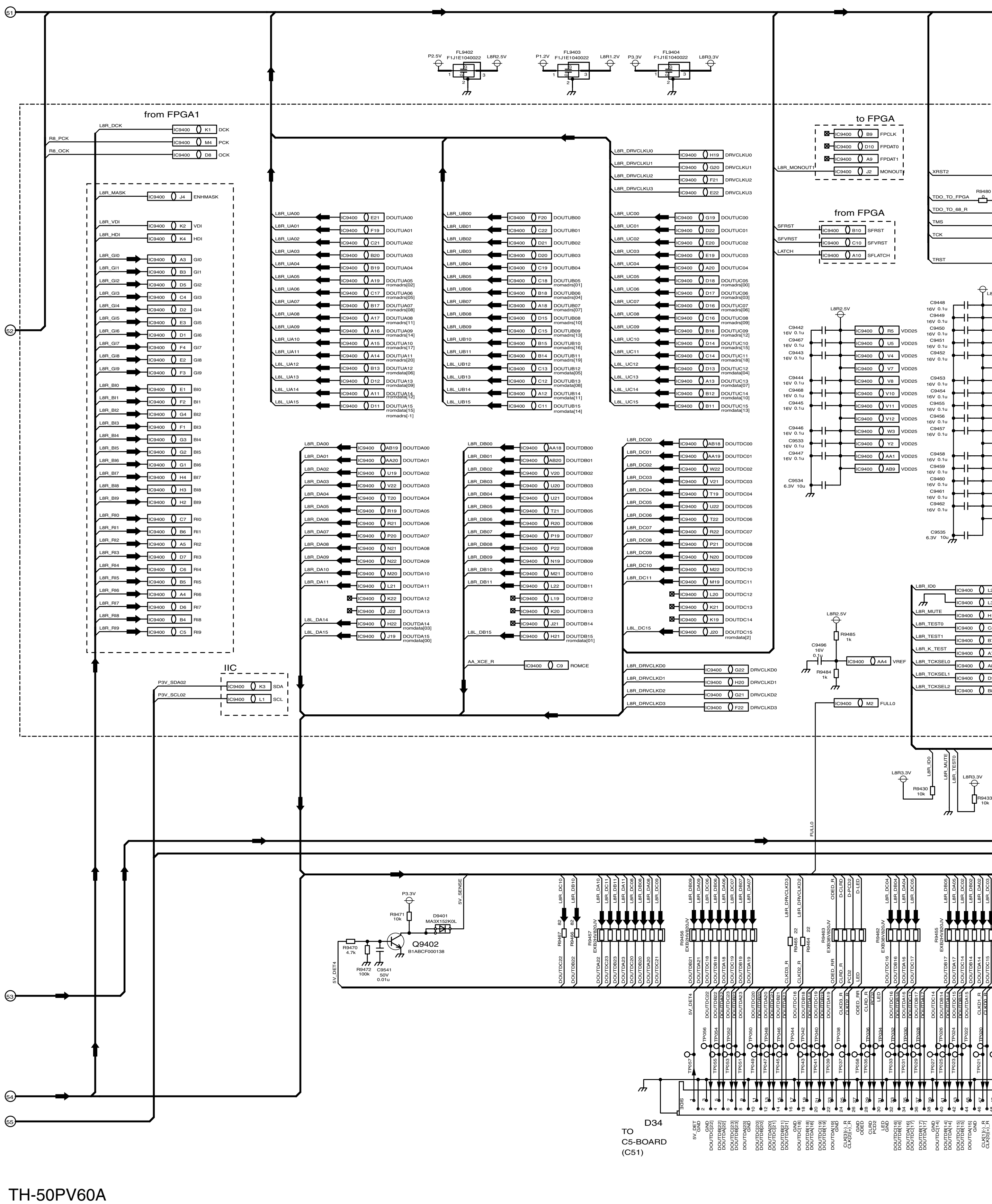
D-BOARD TZTNP01BETB (4/8)
31
32
33
34
35
36
37
38
P5V
C9514
16V
1u
IC9503
C0JBAZ000856
LEVEL CONVERTER
G1
A1
A2
A3
A4
A5
A6
A7
A8
GND
Vcc
G2
Y1
Y2
Y3
Y4
Y5
Y6
Y7
Y8
FP_URH
FP_UEH
FP_USL
FP_USH
FP_UML
FP_UMH
FP_NUEL
FP_URL
URH
UEH
USL
USH
UML
UMH
NUEL
URL
R9527
EXB2HV272JV
DD_ODEU_R
DD_CLRU
DD_PCU2
DD_LEU
DD_ODEU_L
DD_PCU1
L8_PCK
R8_PCK
R9639
47
R9641
47
R9643
0
CPG
C9548
16V
0.1u
R9624
10k
R9625
10k
VSS
CLK2
20MHz
N/C
39.5MHz
CLK1
VSS1
VDD1
36.6MHz
CLK9
SL1
SL0
XT
N/C
84MHz
CLK7
20SSMHz
CLK6
60SSMHz
CLK5
VSS2
VDD2
SL2
STBY
VDD3
XTN
C9547
50V
12p
C9546
50V
12p
X9500
H0J200500038
R9622
0
C9552
16V
0.1u
R9633
47
R9634
47
R9628
10k
C9554
6.3V
10u
L9503
G1C150KA0038
P3.3V
IC9200
C1ZBZ0003186
CLOCK GENE.
R9632
47
R9637
47
L8_OCK
R8_OCK


P5V
C9515
16V
1u
IC9504
C0JBAZ000856
LEVEL CONVERTER
DD_ODEU_R
DD_CLRU
DD_PCU2
DD_LEU
DD_ODEU_L
DD_PCU1
ODEU_R
D-CLRU
D-PCU2
D-LEU
ODEU_L
D-PCU1
R9528
EXB2HV272JV
C9557
16V
1u
IC9505
C0JBAZ000856
LEVEL CONVERTER
DD_LED
DD_PCD1
DD_CLRD
DD_ODED_L
DD_PCD2
DD_ODED_R
D-LED
D-PCD1
D-CLRD
ODED_L
D-PCD2
ODED_R
R9631
EXB2HV272JV
P3.3V
C9542
16V
0.1u
IC9402
C0JBAZ002614
BUS SWITCH
BUS_SW
R9428
EXB8V103JV
C9547
50V
12p
C9546
50V
12p
51
52
53
54
55

TH-50PV60A
D-Board (4 of 8) Schematic Diagram

32 33 34 35 36

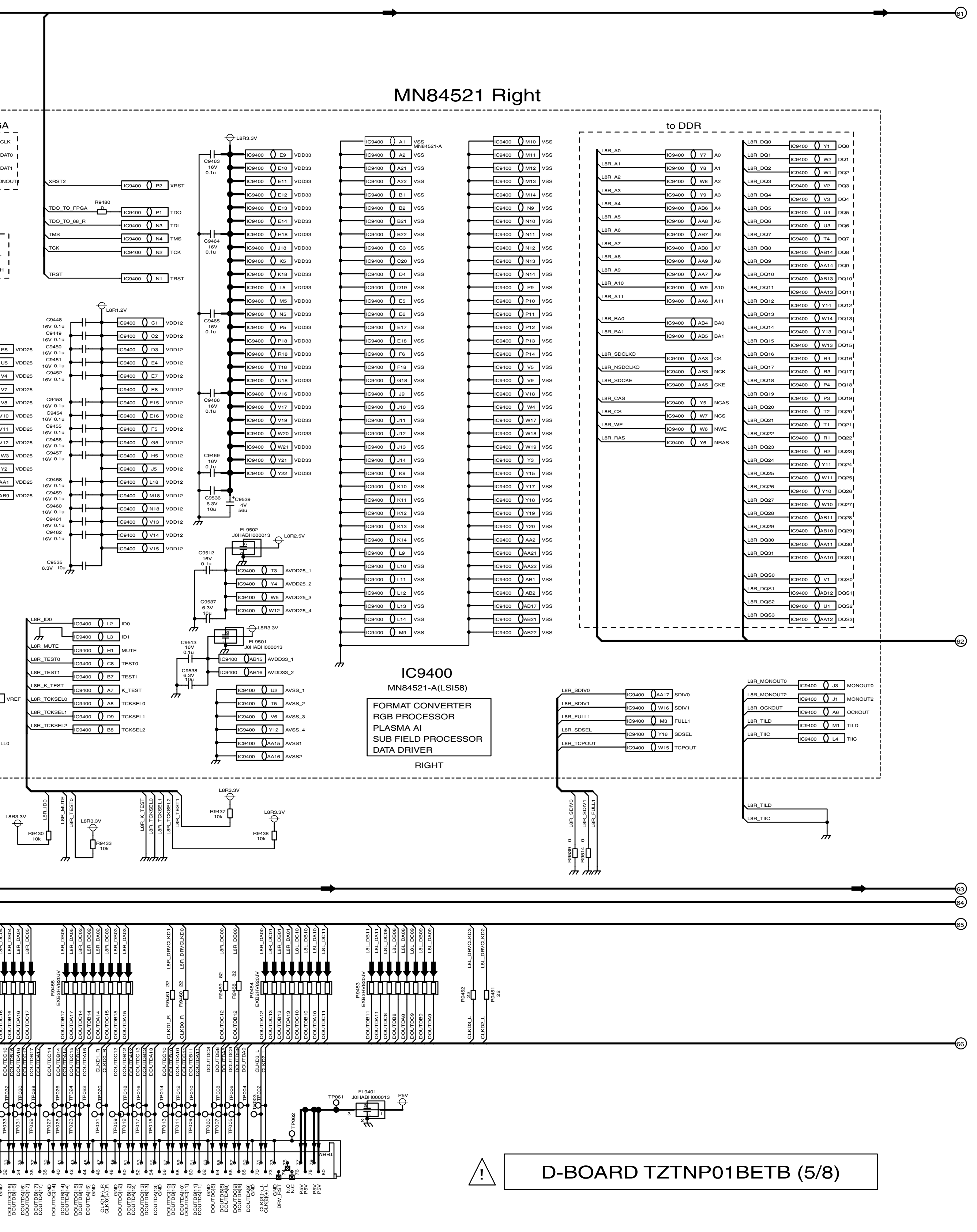
14.34. D-Board (5 of 8) Schematic Diagram



from FPGA1
to FPGA
from FPGA
IIC
FL9402 F1J1E1040022
FL9403 F1J1E1040022
FL9404 F1J1E1040022
P2.5V
L8R2.5V
P1.2V
L8R1.2V
P3.3V
L8R3.3V
IC9400
L8R_DCK
R8_PCK
R8_OCK
L8R_MASK
ENHMASK
L8R_VDI
L8R_HDI
L8R_DRVCLKU0
L8R_DRVCLKU1
L8R_DRVCLKU2
L8R_DRVCLKU3
L8R_MONOUT1
XRST2
TDO_TO_FPGA
TDO_TO_68_R
TMS
TCK
TRST
SFRST
SFVRST
LATCH
VDD25
VREF
FULL0
ROMCE
AA_XCE_R
P3V_SDA02
P3V_SCL02
SDA
SCL
L8R_DRVCLKD0
L8R_DRVCLKD1
L8R_DRVCLKD2
L8R_DRVCLKD3
L8R_ID0
L8R_MUTE
L8R_TEST0
L8R_TEST1
L8R_K_TEST
L8R_TCKSEL0
L8R_TCKSEL1
L8R_TCKSEL2
5V_SENSE
5V_DET4
Q9402
B1ABCF000138
D9401
MA3X152K0L
R9471 10k
R9470 4.7k
R9472 100k
C9541 50V 0.01u
D34
TO
C5-BOARD
(C51)
51
52
53
54
55

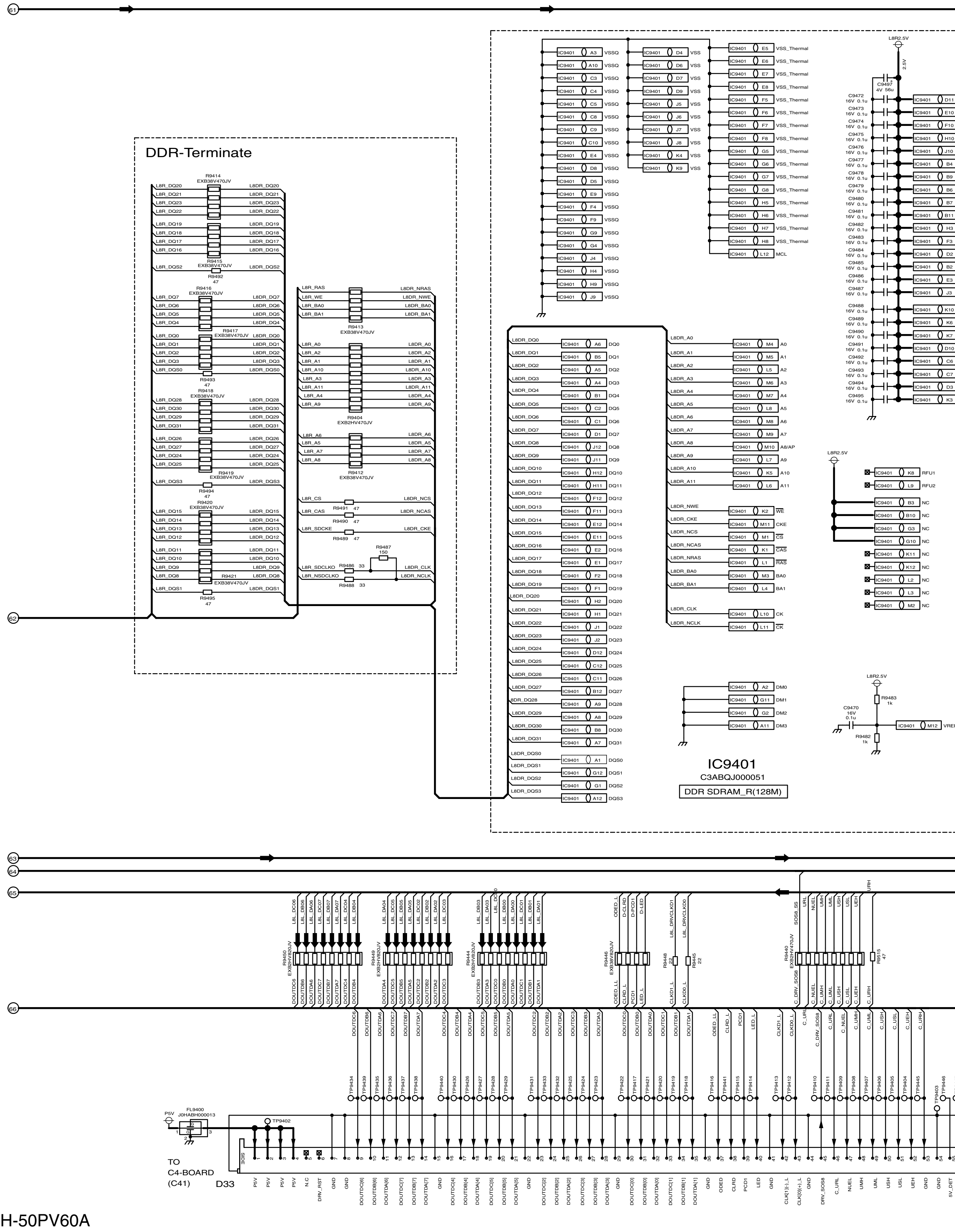
TH-50PV60A
D-Board (5 of 8) Schematic Diagram

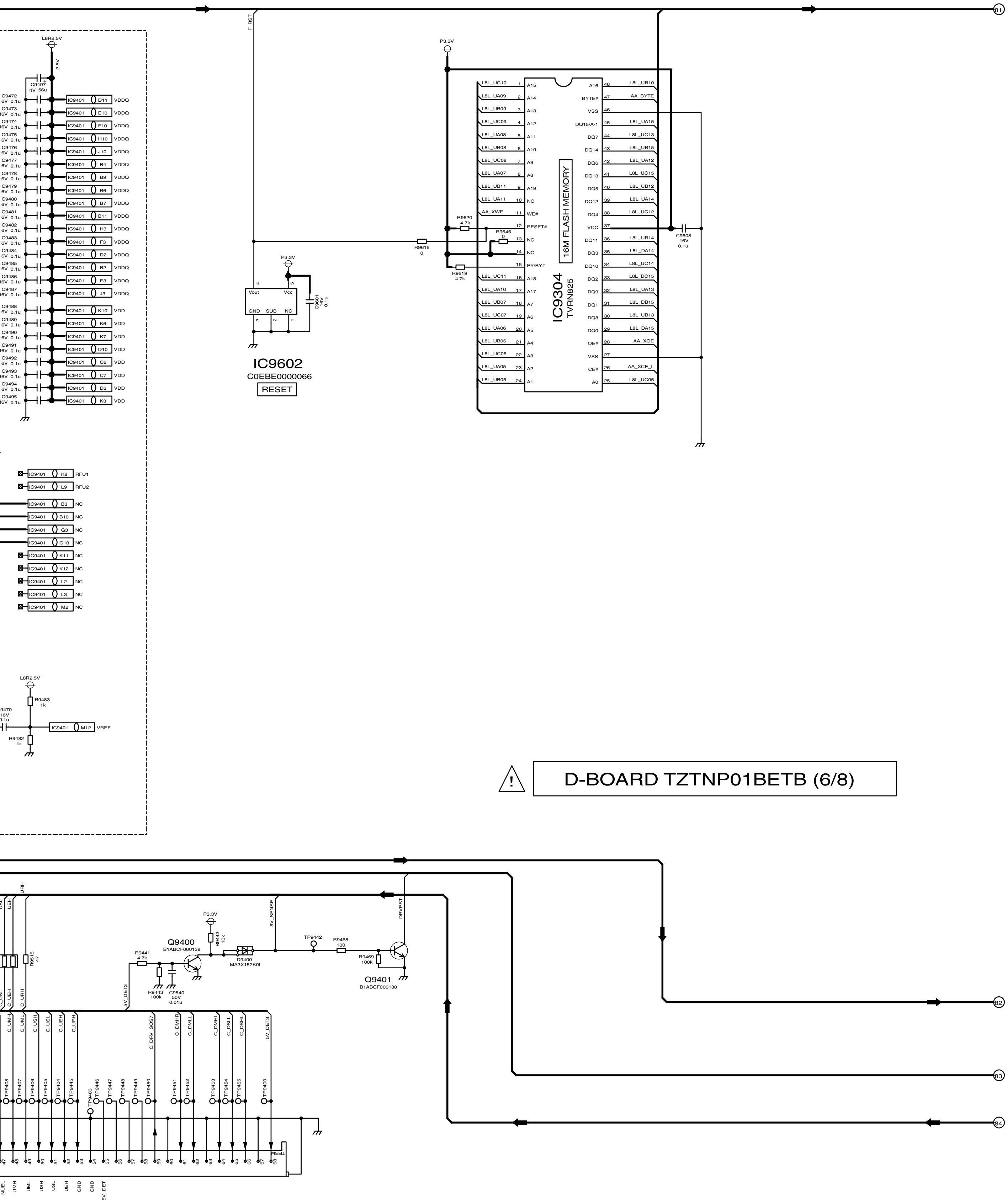
37	38	39	40	41


MN84521 Right
to DDR
IC9400
MN84521-A(LSI58)
FORMAT CONVERTER
RGB PROCESSOR
PLASMA AI
SUB FIELD PROCESSOR
DATA DRIVER
RIGHT
FL9502
J0HABH000013
FL9501
J0HABH000013
FL9401
J0HABH000013
L8R3.3V
L8R1.2V
L8R2.5V
P5V
D-BOARD TZTNP01BETB (5/8)

TH-50PV60A
D-Board (5 of 8) Schematic Diagram

14.35. D-Board (6 of 8) Schematic Diagram

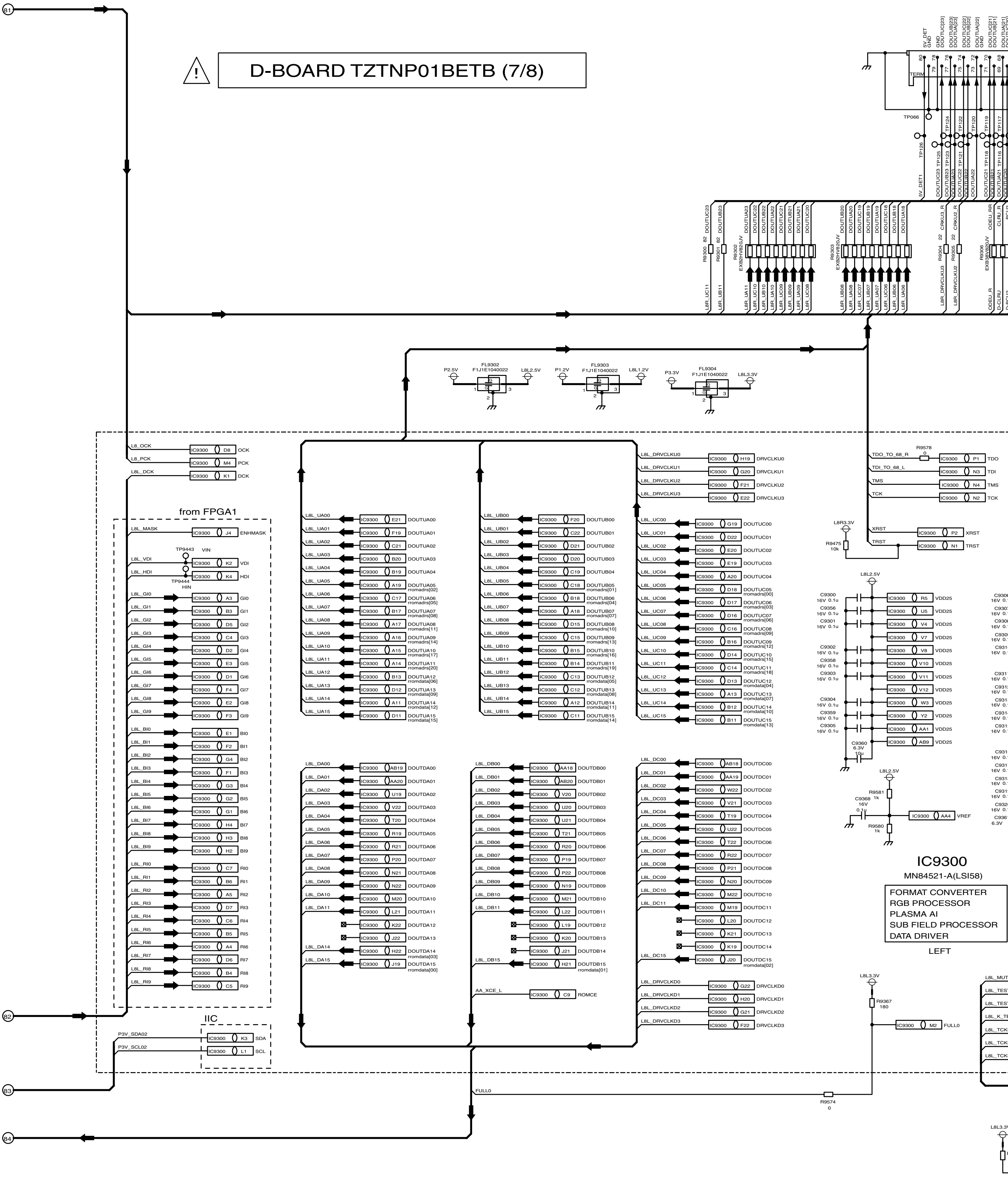

DDR-Terminate
IC9401
C3ABQJ000051
DDR SDRAM_R(128M)
L8R2.5V
FL9400
J0HABH000013
P5V
TP9402
TO
C4-BOARD
(C41)
D33
61
62
63
64
65
66

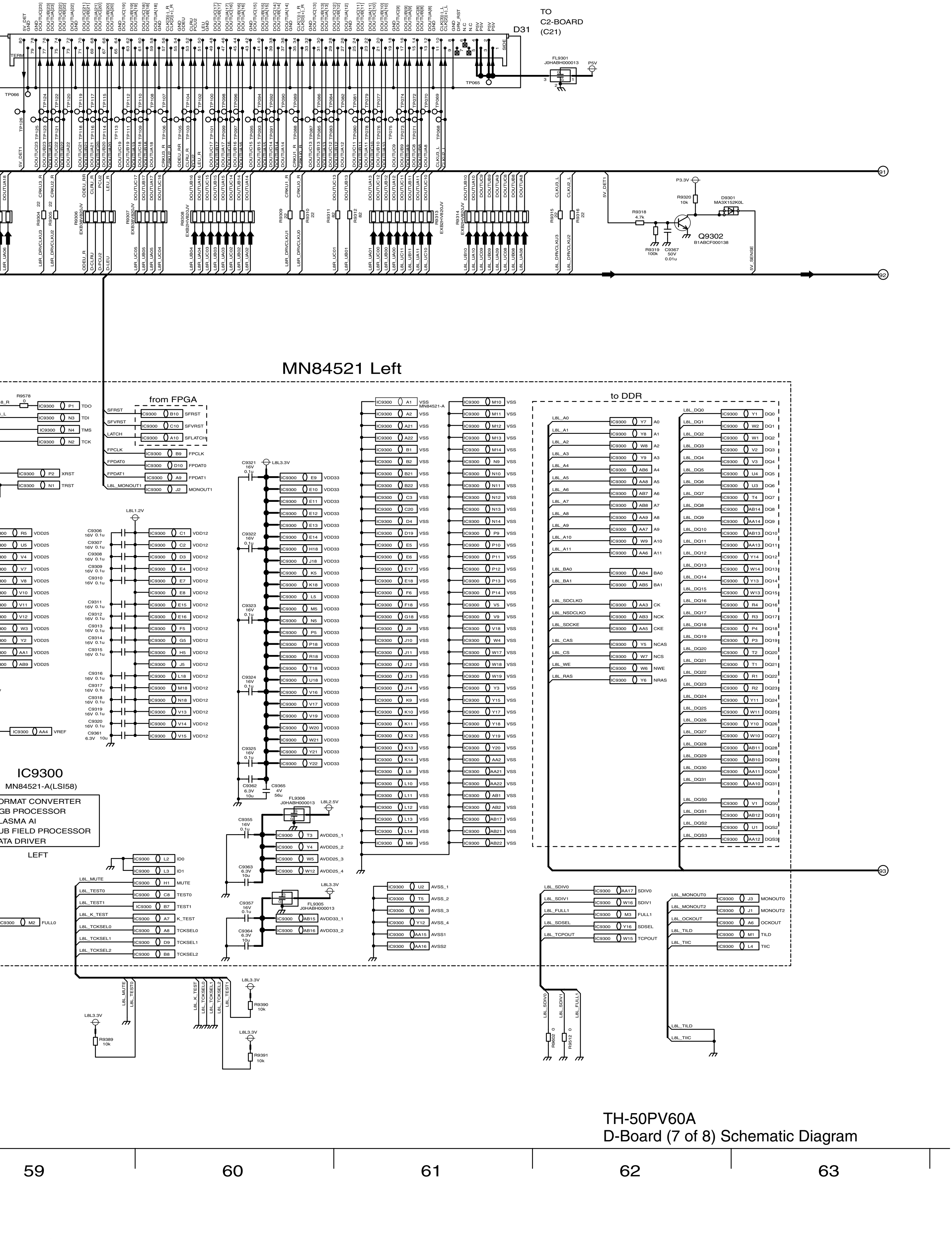

D-BOARD TZTNP01BETB (6/8)
IC9304
TVRN825
16M FLASH MEMORY
IC9602
C0EBE0000066
RESET
Q9400
B1ABCF000138
Q9401
B1ABCF000138
D9400
MA3X152K0L
L8R2.5V
P3.3V
F_RST
5V_SENSE
DRVRST
5V_DET3
VREF
IC9401
VDDQ
VDD
RFU1
RFU2
NC
B1
B2
B3
B4

TH-50PV60A
D-Board (6 of 8) Schematic Diagram

50
51
52
53
54

14.36. D-Board (7 of 8) Schematic Diagram

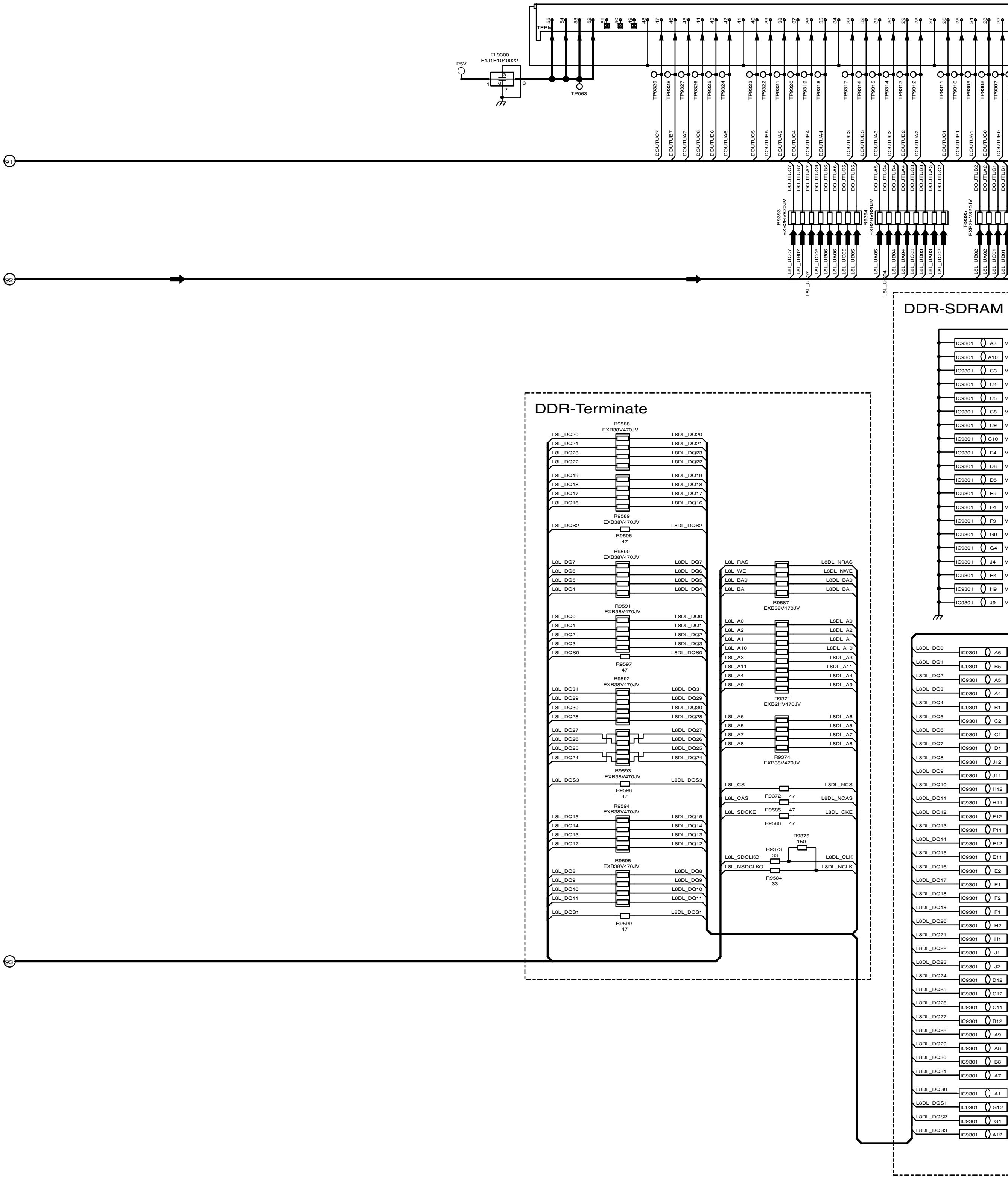

D-BOARD TZTNP01BETB (7/8)
from FPGA1
IIC
IC9300
MN84521-A(LSI58)
FORMAT CONVERTER
RGB PROCESSOR
PLASMA AI
SUB FIELD PROCESSOR
DATA DRIVER
LEFT
FL9302
FL9303
FL9304
F1J1E1040022
P2.5V
L8L2.5V
P1.2V
L8L1.2V
P3.3V
L8L3.3V
81
82
83
84

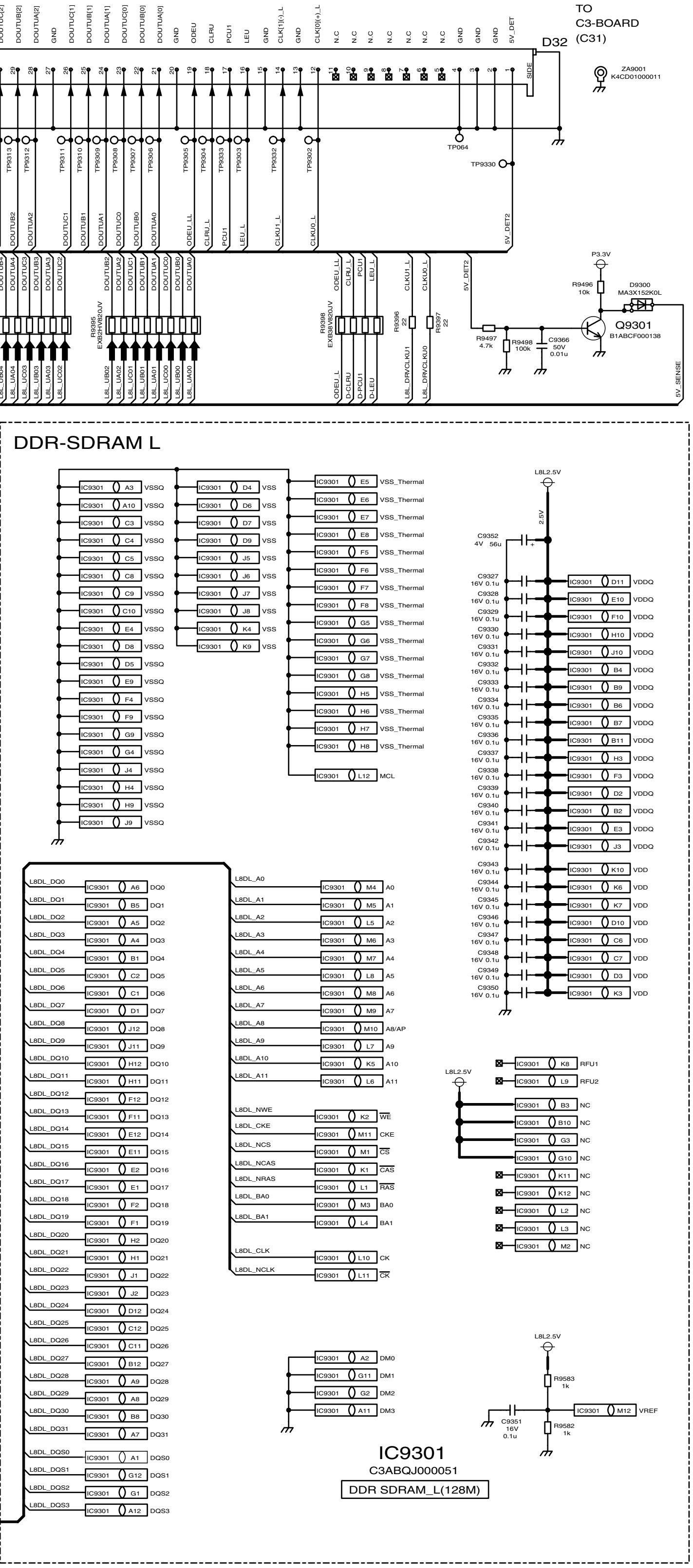

TO
C2-BOARD
(C21)
D31
FL9301
J0HABH000013
P5V
TP065
P3.3V
R9320
10k
D9301
MA3X152K0L
R9318
4.7k
Q9302
B1ABCF000138
R9319
100k
C9367
50V
0.01u
5V_SENSE
MN84521 Left
from FPGA
to DDR
IC9300
MN84521-A(LSI58)
ORMAT CONVERTER
GB PROCESSOR
LASMA AI
UB FIELD PROCESSOR
ATA DRIVER
LEFT
FL9306
J0HABH000013
FL9305
J0HABH000013
R9389
10k
R9390
10k
R9391
10k
R9602
0
R9512
0
59
60
61
62
63

TH-50PV60A
D-Board (7 of 8) Schematic Diagram

14.37. D-Board (8 of 8) Schematic Diagram

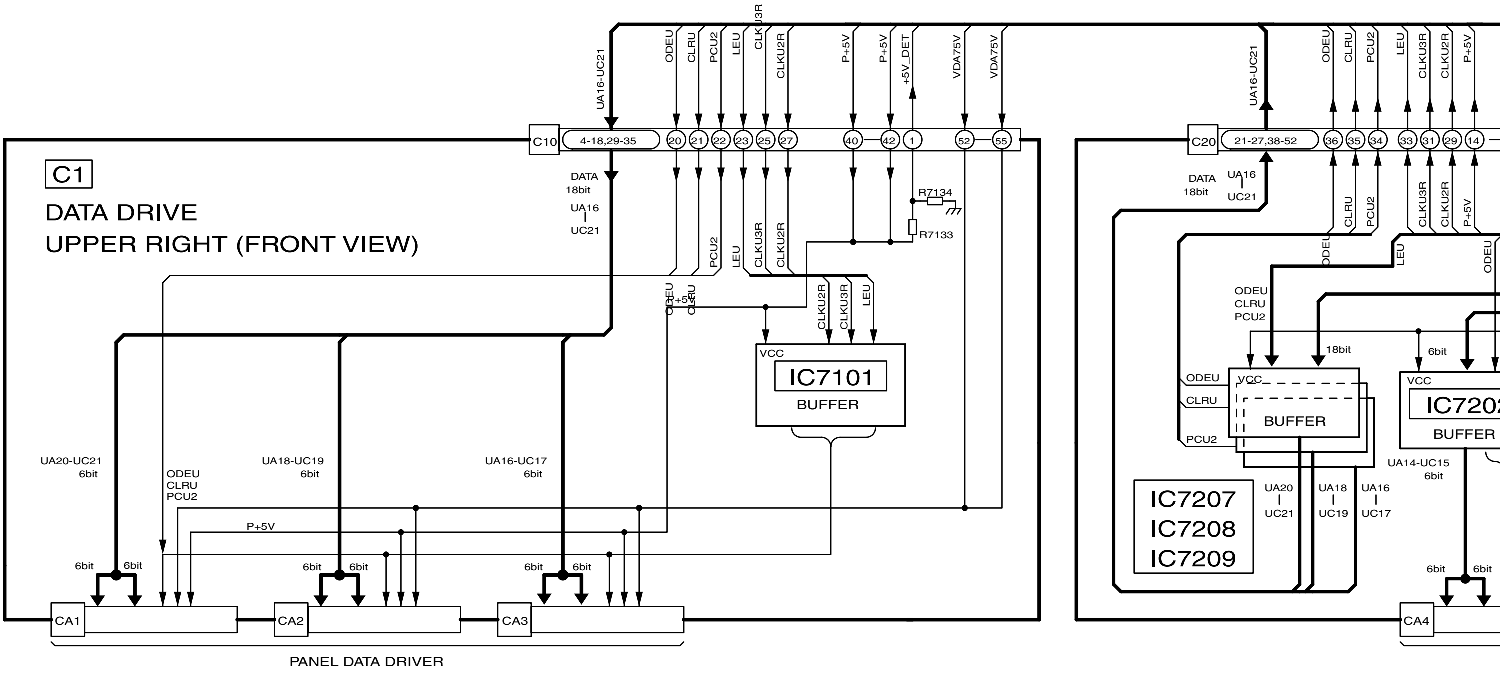
⚠ D-BOARD TZTNP01BETB (8/8)

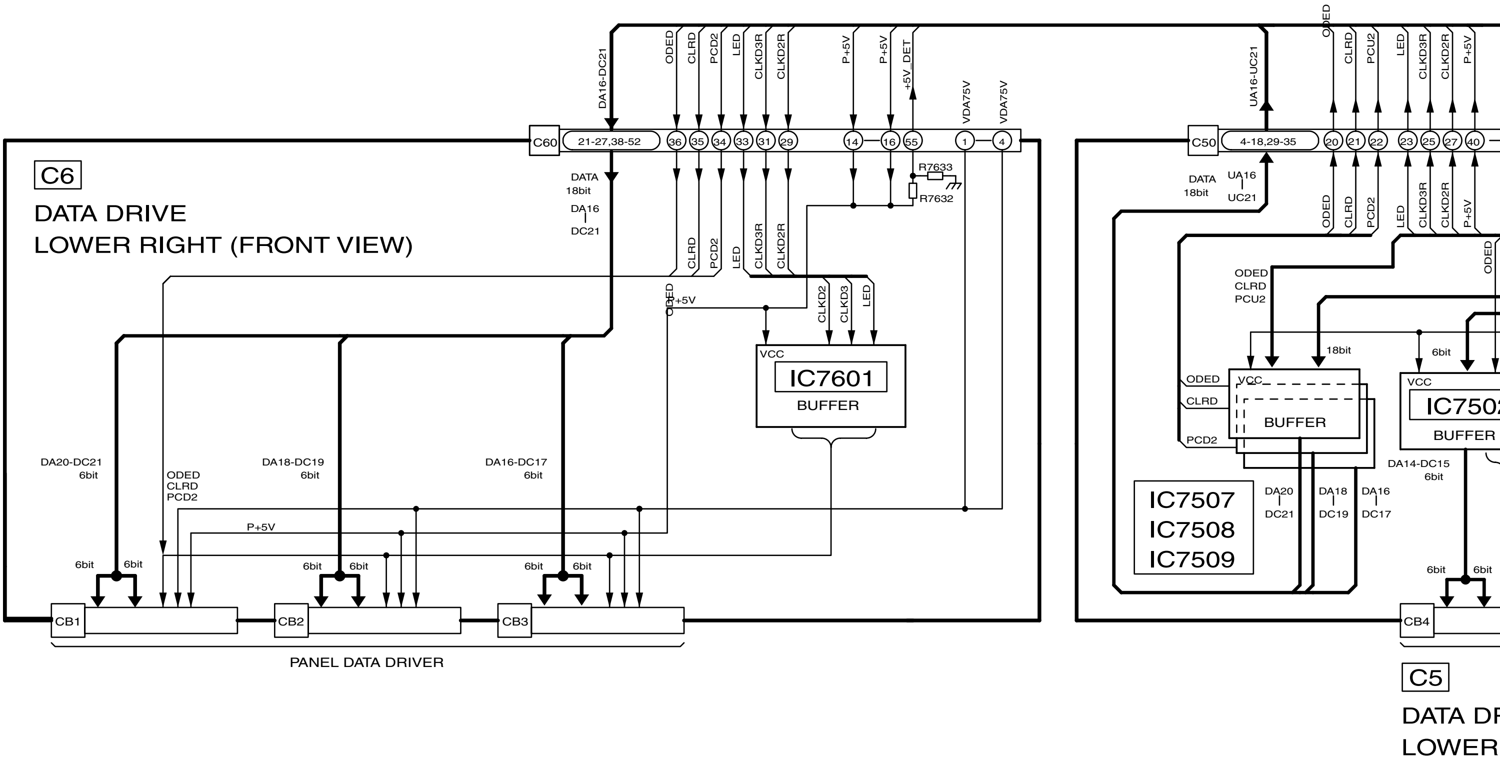

FL9300
F1J1E1040022
P5V
TP063
TERM
91
92
93
R9393
EXB2HV820JV
R9394
EXB2HV820JV
R9395
EXB2HV820JV
DDR-SDRAM
IC9301
DDR-Terminate
R9588
EXB38V470JV
R9589
EXB38V470JV
R9590
EXB38V470JV
R9591
EXB38V470JV
R9592
EXB38V470JV
R9593
EXB38V470JV
R9594
EXB38V470JV
R9595
EXB38V470JV
R9596
47
R9597
47
R9598
47
R9599
47
R9587
EXB38V470JV
R9371
EXB2HV470JV
R9374
EXB38V470JV
R9372 47
R9585 47
R9586 47
R9375
150
R9373
33
R9584
33
L8L_RAS
L8DL_NRAS
L8L_WE
L8DL_NWE
L8L_BA0
L8DL_BA0
L8L_BA1
L8DL_BA1
L8L_CS
L8DL_NCS
L8L_CAS
L8DL_NCAS
L8L_SDCKE
L8DL_CKE
L8L_SDCLKO
L8DL_CLK
L8L_NSDCLKO
L8DL_NCLK


TO
C3-BOARD
(C31)
D32
ZA9001
K4CD01000011
TP064
TP9330
P3.3V
R9496
10k
D9300
MA3X152K0L
Q9301
B1ABCF000138
R9497
4.7k
R9498
100k
C9366
50V
0.01u
5V_DET
5V_DET2
5V_SENSE
R9395
EXB2HV820JV
R9398
EXB38V820JV
R9396
22
R9397
22
DDR-SDRAM L
L8L2.5V
C9352
4V 56u
VSSQ
VSS
VSS_Thermal
MCL
VDDQ
VDD
RFU1
RFU2
NC
VREF
R9583
1k
R9582
1k
C9351
16V
0.1u
DM0
DM1
DM2
DM3
DQS0
DQS1
DQS2
DQS3
WE
CKE
CS
CAS
RAS
BA0
BA1
CK
A8/AP
IC9301
C3ABQJ000051
DDR SDRAM_L(128M)

TH-50PV60A
D-Board (8 of 8) Schematic Diagram

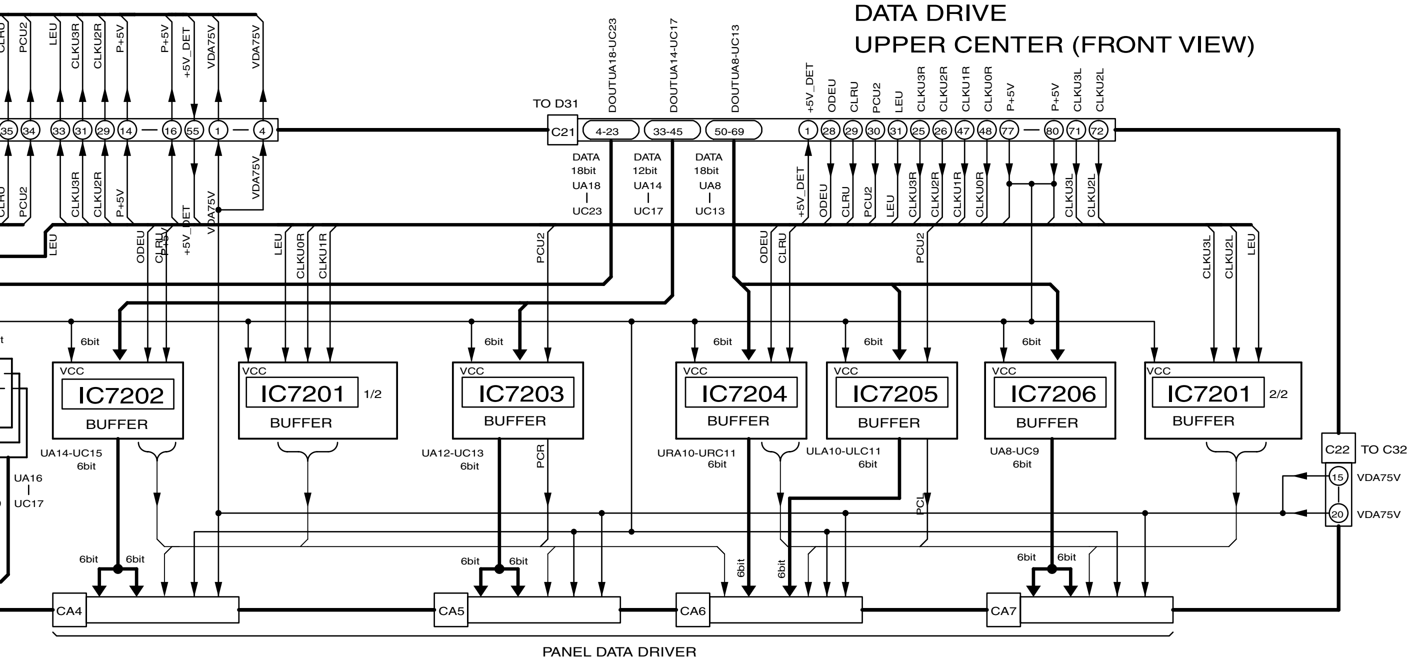
14.38. C1, C2, C5 and C6-Block Diagram

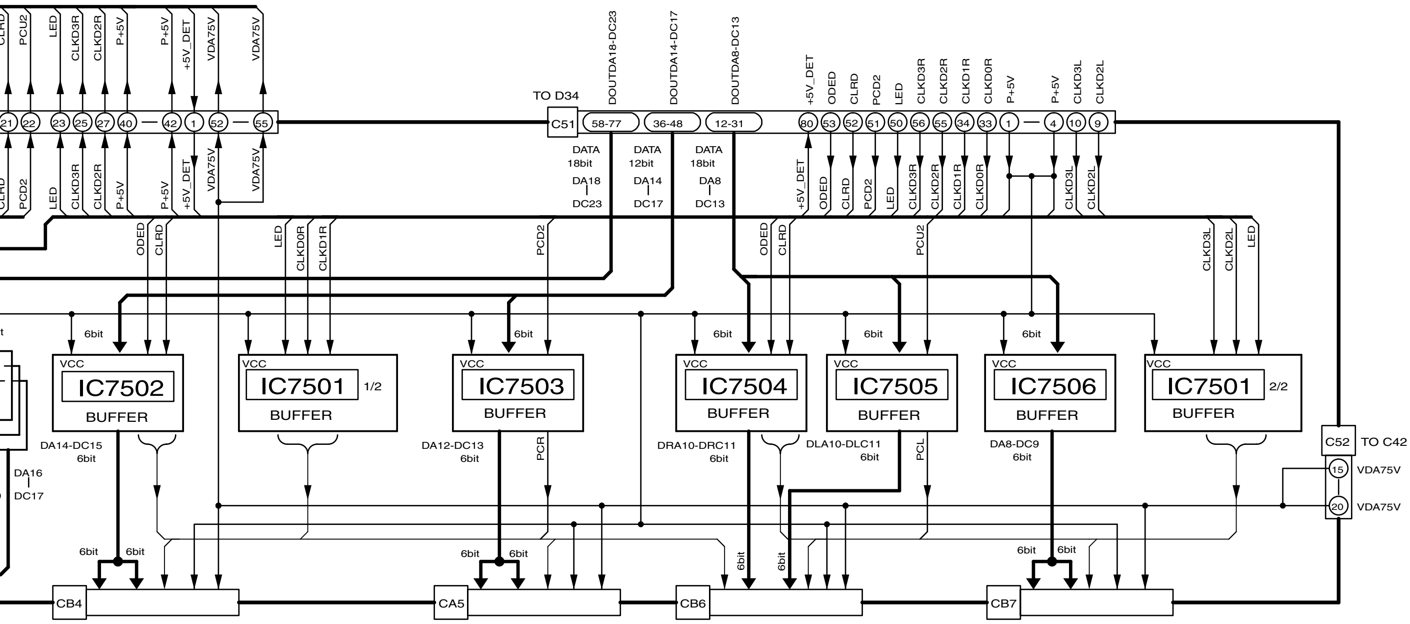

C1
DATA DRIVE
UPPER RIGHT (FRONT VIEW)
C10
4-18,29-35
UA16-UC21
ODEU
CLRU
PCU2
LEU
CLKU3R
CLKU2R
P+5V
+5V_DET
VDA75V
20
21
22
23
25
27
40
42
1
52
55
DATA
18bit
UA16
UC21
R7134
R7133
+5V
VCC
IC7101
BUFFER
UA20-UC21
6bit
UA18-UC19
6bit
UA16-UC17
6bit
6bit
P+5V
CA1
CA2
CA3
PANEL DATA DRIVER
C20
21-27,38-52
36
35
34
33
31
29
14
ODEU
CLRU
PCU2
18bit
6bit
BUFFER
IC7202
IC7207
IC7208
IC7209
UA20
UC21
UA18
UC19
UA16
UC17
UA14-UC15
6bit
CA4


C6
DATA DRIVE
LOWER RIGHT (FRONT VIEW)
C60
21-27,38-52
DA16-DC21
ODED
CLRD
PCD2
LED
CLKD3R
CLKD2R
P+5V
+5V_DET
VDA75V
36
35
34
33
31
29
14
16
55
1
4
DATA
18bit
DA16
DC21
R7633
R7632
+5V
CLKD2
CLKD3
VCC
IC7601
BUFFER
DA20-DC21
6bit
DA18-DC19
6bit
DA16-DC17
6bit
6bit
P+5V
CB1
CB2
CB3
PANEL DATA DRIVER
C50
4-18,29-35
UA16-UC21
UA16
UC21
20
21
22
23
25
27
40
18bit
6bit
BUFFER
IC7502
IC7507
IC7508
IC7509
DA20
DC21
DA18
DC19
DA16
DC17
DA14-DC15
CB4
C5
DATA DR
LOWER

C2

DATA DRIVE
UPPER CENTER (FRONT VIEW)

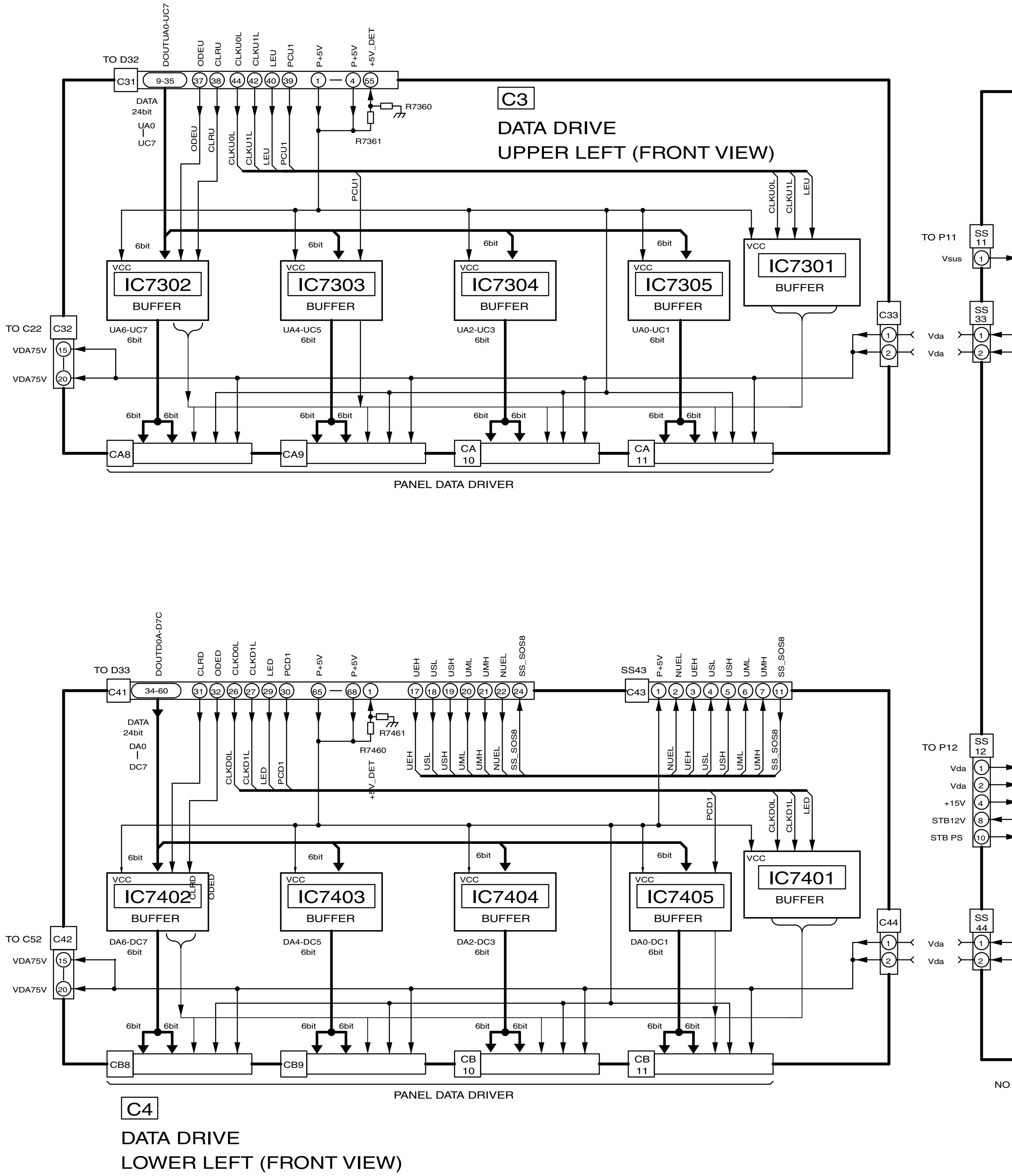

CLRU
PCU2
LEU
CLKU3R
CLKU2R
P+5V
P+5V
+5V_DET
VDA75V
VDA75V
35
34
33
31
29
14
16
55
1
4
TO D31
C21
4-23
33-45
50-69
DOUTUA18-UC23
DOUTUA14-UC17
DOUTUA8-UC13
DATA 18bit UA18 | UC23
DATA 12bit UA14 | UC17
DATA 18bit UA8 | UC13
+5V_DET
ODEU
CLRU
PCU2
LEU
CLKU3R
CLKU2R
CLKU1R
CLKU0R
P+5V
P+5V
CLKU3L
CLKU2L
1
28
29
30
31
25
26
47
48
77
80
71
72
LEU
ODEU
CLRU
P+5V
+5V_DET
VDA75V
LEU
CLKU0R
CLKU1R
PCU2
ODEU
CLRU
PCU2
CLKU3L
CLKU2L
LEU
6bit
VCC
IC7202
BUFFER
IC7201 1/2
IC7203
IC7204
IC7205
IC7206
IC7201 2/2
UA14-UC15 6bit
UA16 | UC17
UA12-UC13 6bit
PCR
URA10-URC11 6bit
ULA10-ULC11 6bit
PCL
UA8-UC9 6bit
C22
TO C32
15
20
VDA75V
VDA75V
6bit
CA4
CA5
CA6
CA7
PANEL DATA DRIVER


CLRD
PCD2
LED
CLKD3R
CLKD2R
P+5V
P+5V
+5V_DET
VDA75V
VDA75V
21
22
23
25
27
40
42
1
52
55
TO D34
C51
58-77
36-48
12-31
DOUTDA18-DC23
DOUTDA14-DC17
DOUTDA8-DC13
DATA 18bit DA18 | DC23
DATA 12bit DA14 | DC17
DATA 18bit DA8 | DC13
+5V_DET
ODED
CLRD
PCD2
LED
CLKD3R
CLKD2R
CLKD1R
CLKD0R
P+5V
P+5V
CLKD3L
CLKD2L
80
53
52
51
50
56
55
34
33
1
4
10
9
ODED
CLRD
LED
CLKD0R
CLKD1R
PCD2
ODED
CLRD
PCU2
CLKD3L
CLKD2L
LED
6bit
VCC
IC7502
BUFFER
IC7501 1/2
IC7503
IC7504
IC7505
IC7506
IC7501 2/2
DA14-DC15 6bit
DA16 | DC17
DA12-DC13 6bit
PCR
DRA10-DRC11 6bit
DLA10-DLC11 6bit
PCL
DA8-DC9 6bit
C52
TO C42
15
20
VDA75V
VDA75V
CB4
CA5
CB6
CB7
PANEL DATA DRIVER

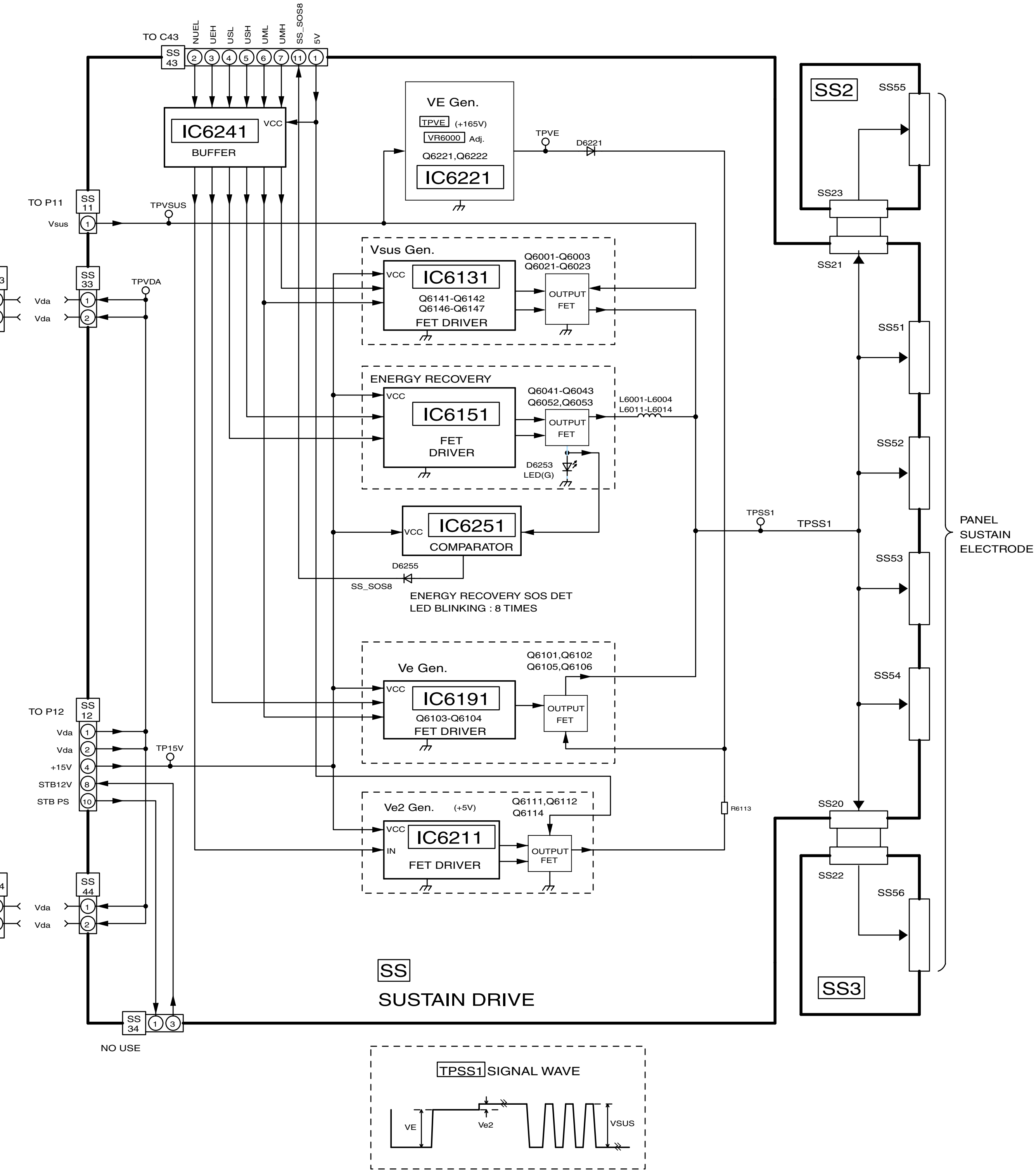
C5

DATA DRIVE
LOWER CENTER (FRONT VIEW)

14.39. C3, C4, SS, SS2 and SS3-Board Block Diagram



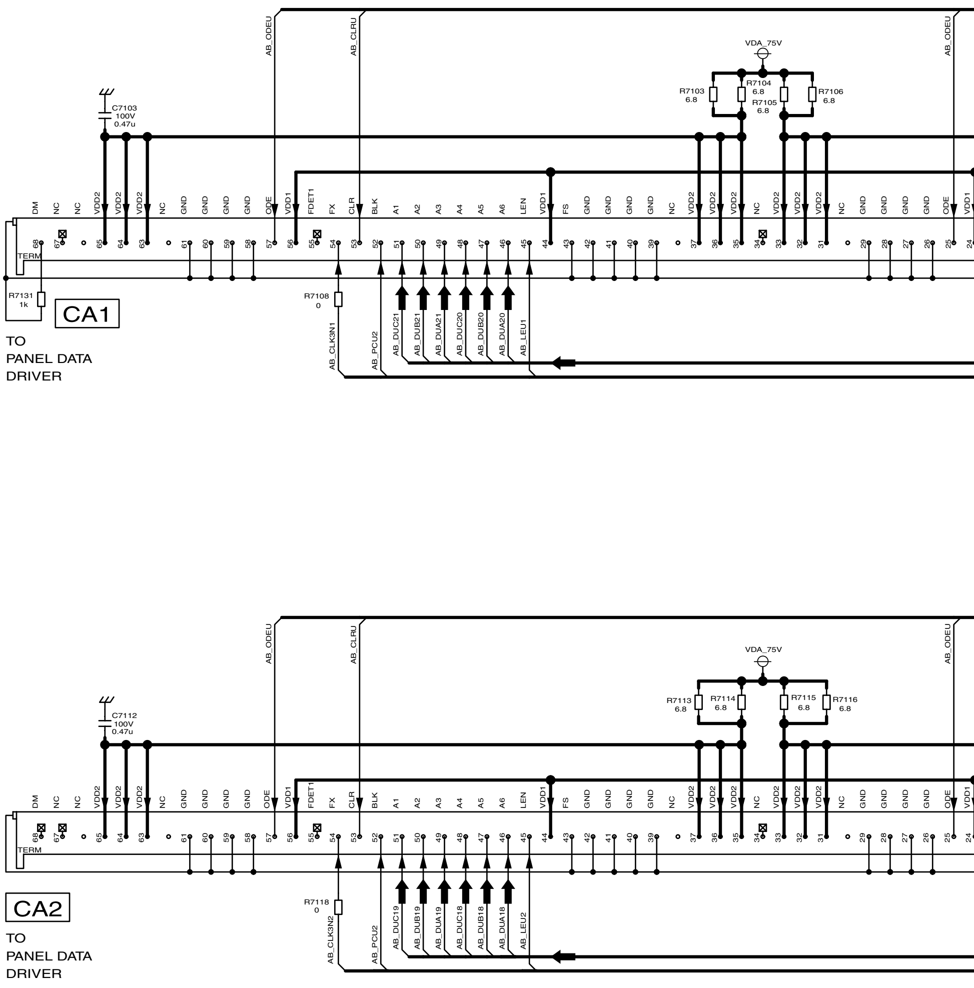
TO D32
C31
DOUTUA0-UC7
ODEU
CLRU
CLKU0L
CLKU1L
LEU
PCU1
P+5V
P+5V
+5V_DET
9-35
37
38
44
42
40
39
1
4
55
R7360
R7361
DATA
24bit
UA0
UC7
C3
DATA DRIVE
UPPER LEFT (FRONT VIEW)
6bit
VCC
IC7302
BUFFER
IC7303
IC7304
IC7305
IC7301
UA6-UC7
6bit
UA4-UC5
6bit
UA2-UC3
6bit
UA0-UC1
6bit
TO C22
C32
VDA75V
15
VDA75V
20
C33
Vda
Vda
TO P11
SS
11
Vsus
SS
33
CA8
CA9
CA
10
CA
11
PANEL DATA DRIVER
TO D33
C41
DOUTD0A-D7C
34-60
CLRD
ODED
CLKD0L
CLKD1L
LED
PCD1
P+5V
P+5V
UEH
USL
USH
UML
UMH
NUEL
SS_SOS8
31
32
26
27
29
30
65
68
1
17
18
19
20
21
22
24
R7461
R7460
+5V_DET
DATA
24bit
DA0
DC7
SS43
C43
P+5V
NUEL
UEH
USL
USH
UML
UMH
SS_SOS8
1
2
3
4
5
6
7
11
TO P12
SS
12
Vda
Vda
+15V
STB12V
STB PS
1
2
4
8
10
IC7402
IC7403
IC7404
IC7405
IC7401
BUFFER
DA6-DC7
6bit
DA4-DC5
6bit
DA2-DC3
6bit
DA0-DC1
6bit
TO C52
C42
VDA75V
VDA75V
C44
SS
44
Vda
Vda
CB8
CB9
CB
10
CB
11
PANEL DATA DRIVER
NO
C4
DATA DRIVE
LOWER LEFT (FRONT VIEW)


TO C43
SS 43
NUEL
UEH
USL
USH
UML
UMH
SS_SOS8
5V
IC6241
VCC
BUFFER
TO P11
SS 11
Vsus
TPVSUS
SS 33
TPVDA
Vda
Vda
VE Gen.
TPVE (+165V)
VR6000 Adj.
Q6221,Q6222
IC6221
TPVE
D6221
Vsus Gen.
Q6001-Q6003
Q6021-Q6023
VCC
IC6131
Q6141-Q6142
Q6146-Q6147
FET DRIVER
OUTPUT FET
ENERGY RECOVERY
VCC
IC6151
Q6041-Q6043
Q6052,Q6053
OUTPUT FET
FET DRIVER
L6001-L6004
L6011-L6014
D6253
LED(G)
VCC
IC6251
COMPARATOR
D6255
SS_SOS8
ENERGY RECOVERY SOS DET
LED BLINKING : 8 TIMES
TPSS1
TPSS1
Ve Gen.
Q6101,Q6102
Q6105,Q6106
VCC
IC6191
Q6103-Q6104
FET DRIVER
OUTPUT FET
TO P12
SS 12
Vda
Vda
+15V
STB12V
STB PS
TP15V
Ve2 Gen.
(+5V)
Q6111,Q6112
Q6114
VCC
IN
IC6211
FET DRIVER
OUTPUT FET
R6113
SS 44
Vda
Vda
SS
SUSTAIN DRIVE
SS 34
NO USE
SS2
SS55
SS23
SS21
SS51
SS52
SS53
SS54
SS20
SS22
SS56
SS3
PANEL
SUSTAIN
ELECTRODE
TPSS1 SIGNAL WAVE
VE
Ve2
VSUS

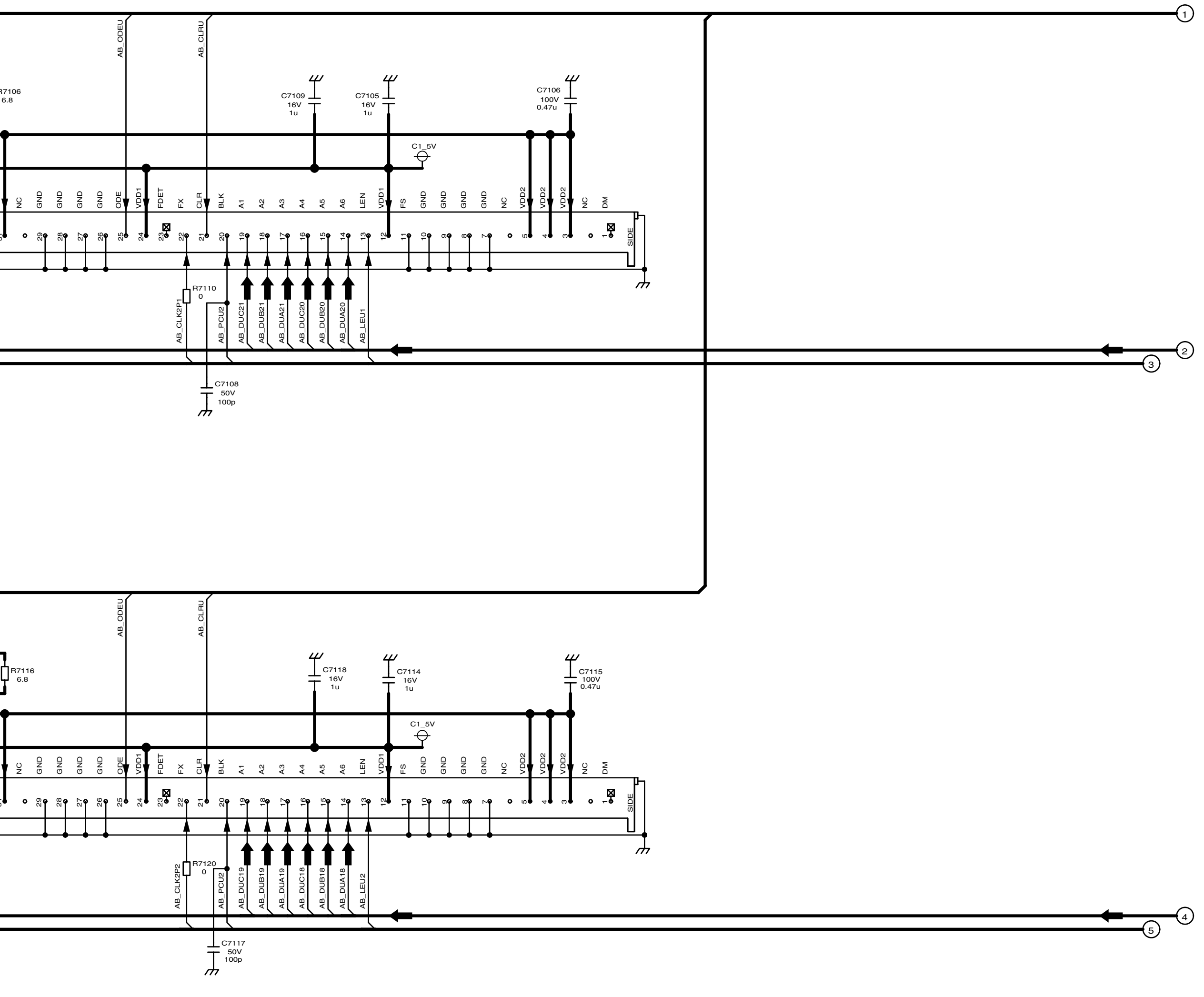
TH-50PV60A
C3, C4, SS, SS2 and SS3-Board Block Diagram

14.40. C1-Board (1 of 2) Schematic Diagram

⚠ C1-BOARD TNPA3821 (1/2)


AB_ODEU
AB_CLRU
VDA_75V
R7103 6.8
R7104 6.8
R7105 6.8
R7106 6.8
C7103 100V 0.47u
TERM
R7131 1k
R7108 0
CA1
TO PANEL DATA DRIVER
AB_CLK3N1
AB_PCU2
AB_DUC21
AB_DUB21
AB_DUA21
AB_DUC20
AB_DUB20
AB_DUA20
AB_LEU1
R7113 6.8
R7114 6.8
R7115 6.8
R7116 6.8
C7112 100V 0.47u
R7118 0
CA2
TO PANEL DATA DRIVER
AB_CLKSN2
AB_PCU2
AB_DUC19
AB_DUB19
AB_DUA19
AB_DUC18
AB_DUB18
AB_DUA18
AB_LEU2

TH-50PV60A
C1-Board (1 of 2) Schematic Diagram

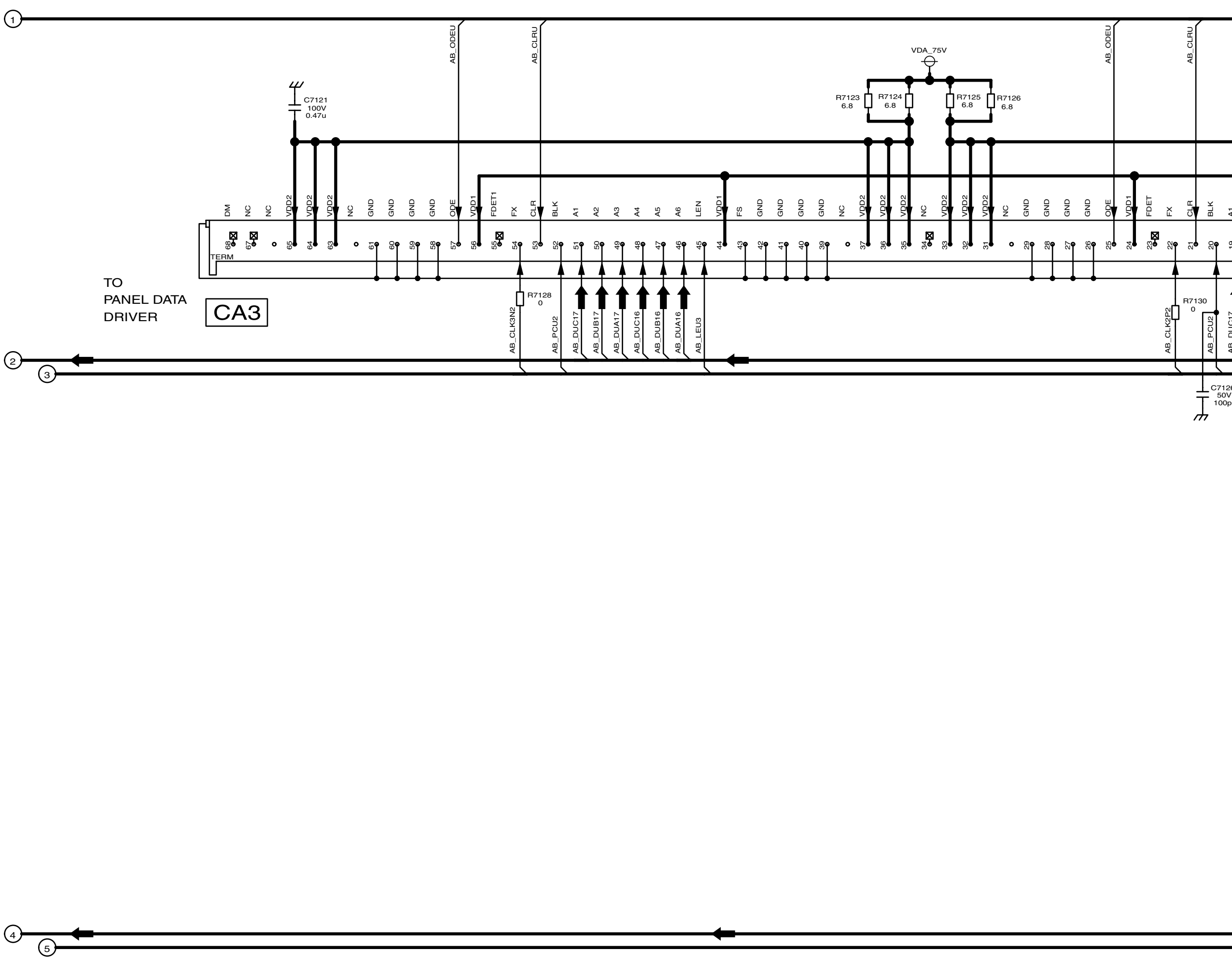

AB_ODEU
AB_CLRU
R7106
6.8
C7109
16V
1u
C7105
16V
1u
C7106
100V
0.47u
C1_5V
NC
GND
GND
GND
GND
ODE
VDD1
FDET
FX
CLR
BLK
A1
A2
A3
A4
A5
A6
LEN
VDD1
FS
GND
GND
GND
GND
NC
VDD2
VDD2
VDD2
NC
DM
SIDE
R7110
0
AB_CLK2P1
AB_PCU2
AB_DUC21
AB_DUB21
AB_DUA21
AB_DUC20
AB_DUB20
AB_DUA20
AB_LEU1
C7108
50V
100p
①
②
③
AB_ODEU
AB_CLRU
R7116
6.8
C7118
16V
1u
C7114
16V
1u
C7115
100V
0.47u
C1_5V
SIDE
R7120
0
AB_CLK2P2
AB_PCU2
AB_DUC19
AB_DUB19
AB_DUA19
AB_DUC18
AB_DUB18
AB_DUA18
AB_LEU2
C7117
50V
100p
④
⑤

TH-50PV60A
C1-Board (1 of 2) Schematic Diagram

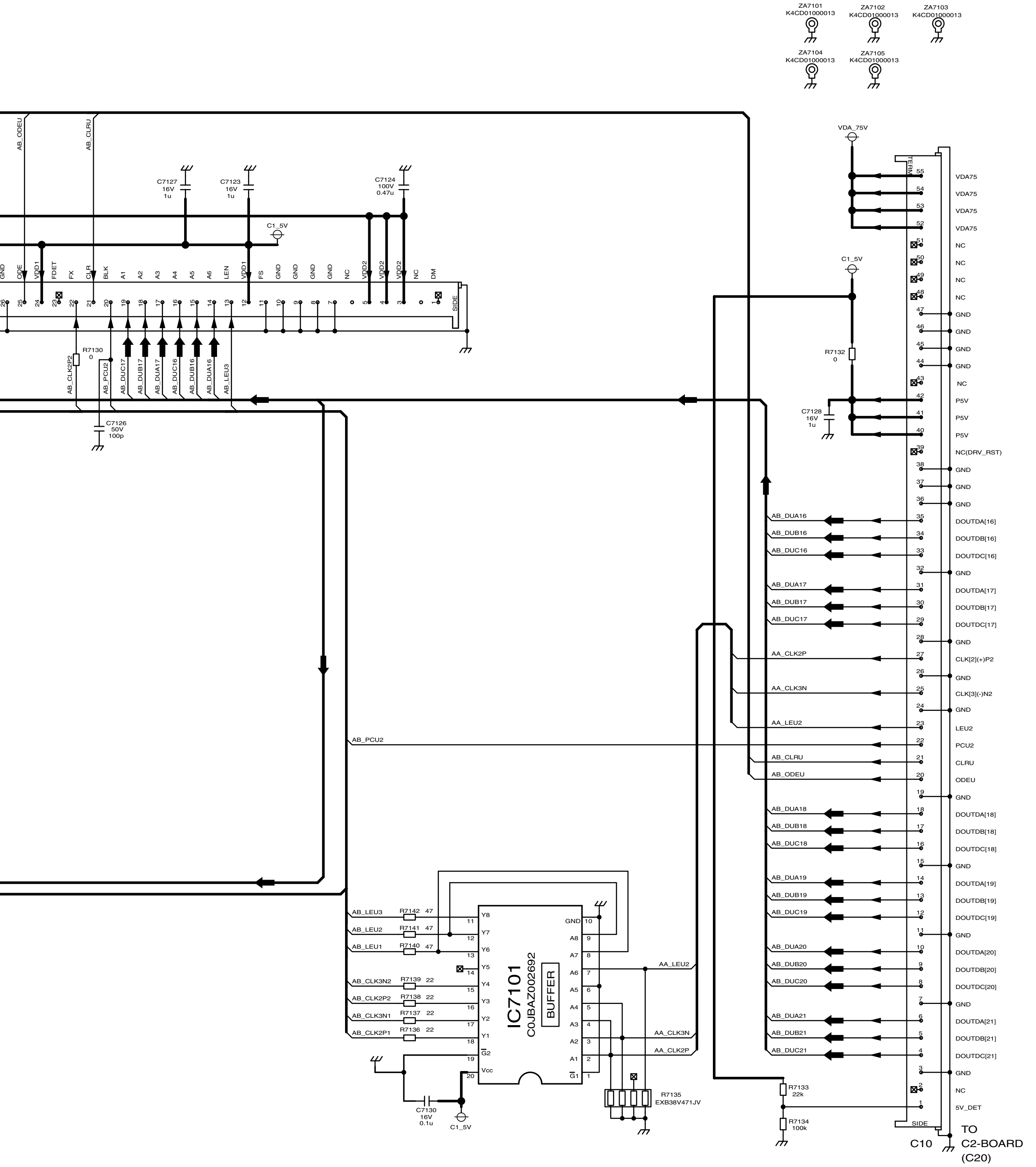
5 6 7 8

14.41. C1-Board (2 of 2) Schematic Diagram

⚠ C1-BOARD TNPA3821 (2/2)



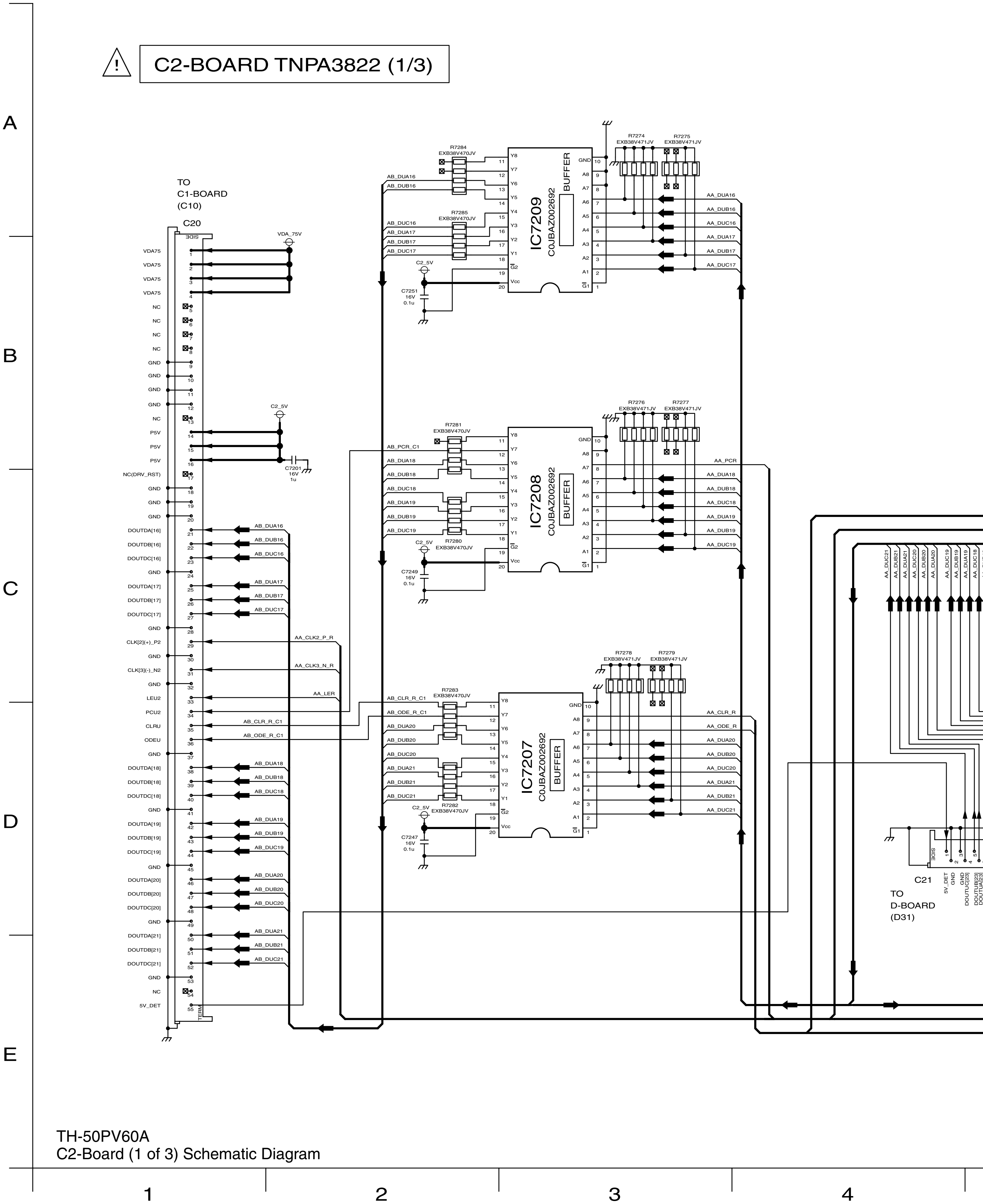
1
2
3
4
5
AB_ODEU
AB_CLRU
VDA_75V
C7121
100V
0.47u
R7123
6.8
R7124
6.8
R7125
6.8
R7126
6.8
DM
NC
NC
VDD2
VDD2
VDD2
NC
GND
GND
GND
GND
ODE
VDD1
FDET1
FX
CLR
BLK
A1
A2
A3
A4
A5
A6
LEN
VDD1
FS
GND
GND
GND
GND
NC
VDD2
VDD2
VDD2
NC
VDD2
VDD2
VDD2
NC
GND
GND
GND
GND
ODE
VDD1
FDET
FX
CLR
BLK
68
67
65
64
63
61
60
59
58
57
56
55
54
53
52
51
50
49
48
47
46
45
44
43
42
41
40
39
37
36
35
34
33
32
31
29
28
27
26
25
24
23
22
21
20
TERM
TO
PANEL DATA
DRIVER
CA3
R7128
0
AB_CLK3N2
AB_PCU2
AB_DUC17
AB_DUB17
AB_DUA17
AB_DUC16
AB_DUB16
AB_DUA16
AB_LEU3
R7130
0
AB_CLK2P2
AB_PCU2


ZA7101 K4CD01000013
ZA7102 K4CD01000013
ZA7103 K4CD01000013
ZA7104 K4CD01000013
ZA7105 K4CD01000013
VDA_75V
C1_5V
C7127 16V 1u
C7123 16V 1u
C7124 100V 0.47u
C7126 50V 100p
C7128 16V 1u
C7130 16V 0.1u
R7130 0
R7132 0
R7133 22k
R7134 100k
R7135 EXB38V471JV
R7136 22
R7137 22
R7138 22
R7139 22
R7140 47
R7141 47
R7142 47
IC7101
C0JBAZ002692
BUFFER
AB_ODEU
AB_CLRU
AB_CLK2P2
AB_PCU2
AB_DUC17
AB_DUB17
AB_DUA17
AB_DUC16
AB_DUB16
AB_DUA16
AB_LEU3
AB_LEU2
AB_LEU1
AB_CLK3N2
AB_CLK2P2
AB_CLK3N1
AB_CLK2P1
AA_LEU2
AA_CLK3N
AA_CLK2P
AB_DUA18
AB_DUB18
AB_DUC18
AB_DUA19
AB_DUB19
AB_DUC19
AB_DUA20
AB_DUB20
AB_DUC20
AB_DUA21
AB_DUB21
AB_DUC21
AA_CLK2P
AA_CLK3N
AA_LEU2
AB_CLRU
AB_ODEU
GND
ODE
VDD1
FDET
FX
CLR
BLK
A1
A2
A3
A4
A5
A6
LEN
VDD1
FS
GND
GND
GND
GND
NC
VDD2
VDD2
VDD2
NC
DM
SIDE
TERM
VDA75
VDA75
VDA75
VDA75
NC
NC
NC
NC
GND
GND
GND
GND
NC
P5V
P5V
P5V
NC(DRV_RST)
GND
GND
GND
DOUTDA[16]
DOUTDB[16]
DOUTDC[16]
GND
DOUTDA[17]
DOUTDB[17]
DOUTDC[17]
GND
CLK[2](+)P2
GND
CLK[3](-)N2
GND
LEU2
PCU2
CLRU
ODEU
GND
DOUTDA[18]
DOUTDB[18]
DOUTDC[18]
GND
DOUTDA[19]
DOUTDB[19]
DOUTDC[19]
GND
DOUTDA[20]
DOUTDB[20]
DOUTDC[20]
GND
DOUTDA[21]
DOUTDB[21]
DOUTDC[21]
GND
NC
5V_DET
SIDE
C10
TO
C2-BOARD
(C20)

TH-50PV60A
C1-Board (2 of 2) Schematic Diagram

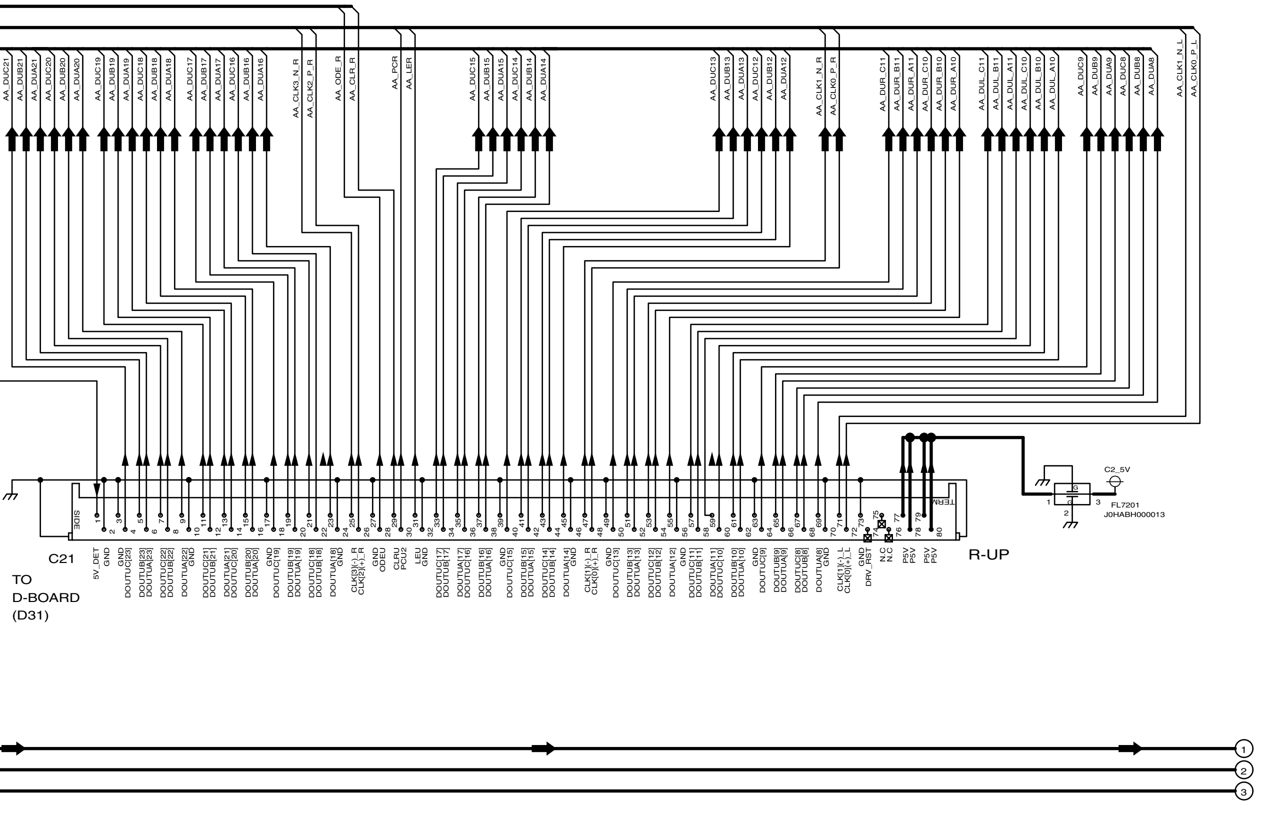
12 13 14 15

14.42. C2-Board (1 of 3) Schematic Diagram



C2-BOARD TNPA3822 (1/3)
A
B
C
D
E
1
2
3
4
TO C1-BOARD (C10)
C20
SIDE
TERM
VDA75
NC
GND
P5V
NC(DRV_RST)
DOUTDA[16]
DOUTDB[16]
DOUTDC[16]
DOUTDA[17]
DOUTDB[17]
DOUTDC[17]
CLK[2](+)_P2
CLK[3](-)_N2
LEU2
PCU2
CLRU
ODEU
DOUTDA[18]
DOUTDB[18]
DOUTDC[18]
DOUTDA[19]
DOUTDB[19]
DOUTDC[19]
DOUTDA[20]
DOUTDB[20]
DOUTDC[20]
DOUTDA[21]
DOUTDB[21]
DOUTDC[21]
5V_DET
VDA_75V
C2_5V
C7201 16V 1u
AA_CLK2_P_R
AA_CLK3_N_R
AA_LER
AB_CLR_R_C1
AB_ODE_R_C1
IC7209
C0JBAZ002692
BUFFER
IC7208
C0JBAZ002692
BUFFER
IC7207
C0JBAZ002692
BUFFER
R7284 EXB38V470JV
R7285 EXB38V470JV
R7281 EXB38V470JV
R7280 EXB38V470JV
R7283 EXB38V470JV
R7282 EXB38V470JV
R7274 EXB38V471JV
R7275 EXB38V471JV
R7276 EXB38V471JV
R7277 EXB38V471JV
R7278 EXB38V471JV
R7279 EXB38V471JV
C7251 16V 0.1u
C7249 16V 0.1u
C7247 16V 0.1u
AB_PCR_C1
AA_PCR
AA_CLR_R
AA_ODE_R
AA_DUA16
AA_DUB16
AA_DUC16
AA_DUA17
AA_DUB17
AA_DUC17
AA_DUA18
AA_DUB18
AA_DUC18
AA_DUA19
AA_DUB19
AA_DUC19
AA_DUA20
AA_DUB20
AA_DUC20
AA_DUA21
AA_DUB21
AA_DUC21
C21
TO D-BOARD (D31)
5V_DET
GND
DOUTUC[23]
DOUTUA[23]

TH-50PV60A
C2-Board (1 of 3) Schematic Diagram

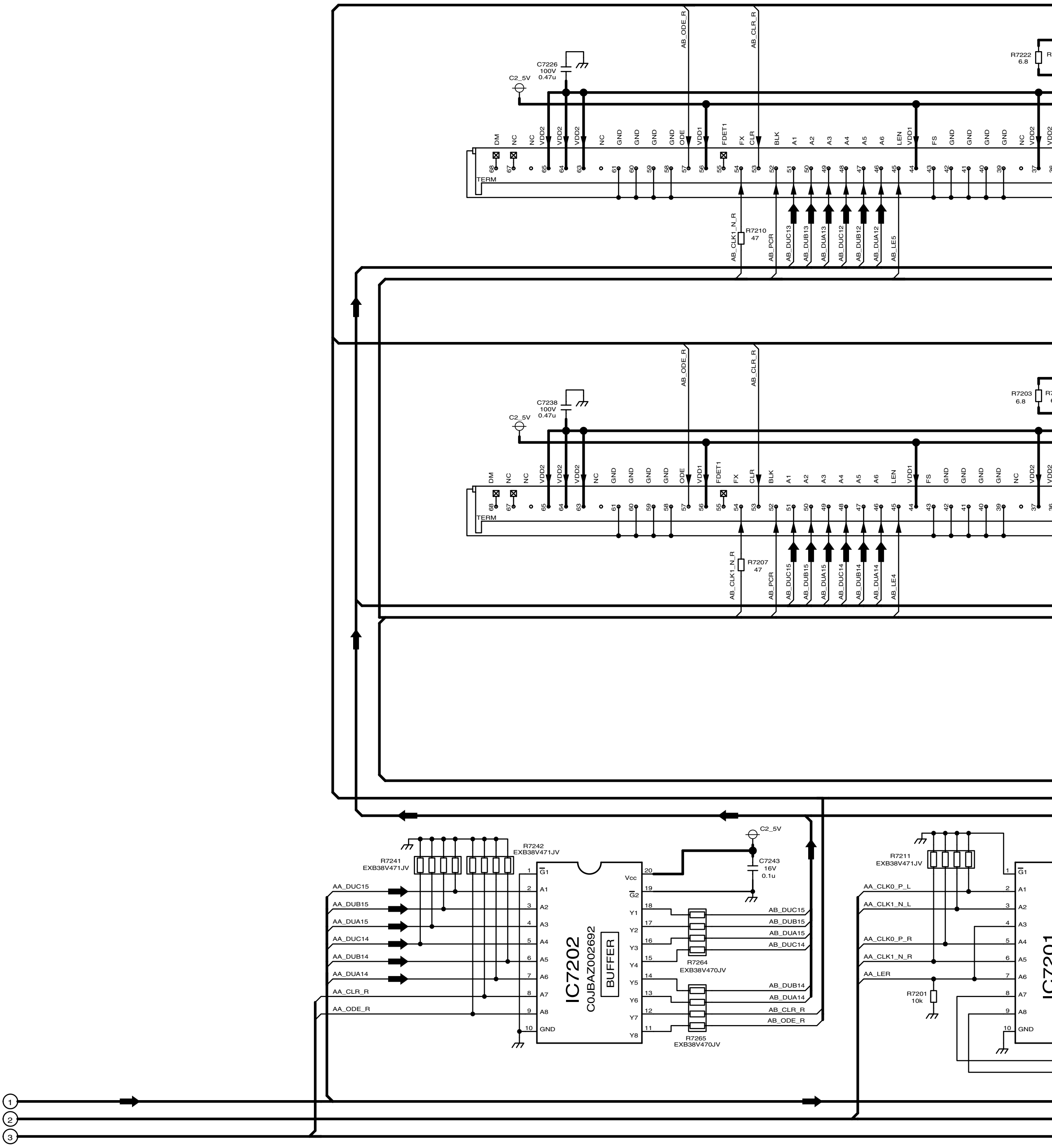

AA_DUC21
AA_DUB21
AA_DUA21
AA_DUC20
AA_DUB20
AA_DUA20
AA_DUC19
AA_DUB19
AA_DUA19
AA_DUC18
AA_DUB18
AA_DUA18
AA_DUC17
AA_DUB17
AA_DUA17
AA_DUC16
AA_DUB16
AA_DUA16
AA_CLK3_N_R
AA_CLK2_P_R
AA_ODE_R
AA_CLR_R
AA_PCR
AA_LER
AA_DUC15
AA_DUB15
AA_DUA15
AA_DUC14
AA_DUB14
AA_DUA14
AA_DUC13
AA_DUB13
AA_DUA13
AA_DUC12
AA_DUB12
AA_DUA12
AA_CLK1_N_R
AA_CLK0_P_R
AA_DUR_C11
AA_DUR_B11
AA_DUR_A11
AA_DUR_C10
AA_DUR_B10
AA_DUR_A10
AA_DUL_C11
AA_DUL_B11
AA_DUL_A11
AA_DUL_C10
AA_DUL_B10
AA_DUL_A10
AA_DUC9
AA_DUB9
AA_DUA9
AA_DUC8
AA_DUB8
AA_DUA8
AA_CLK1_N_L
AA_CLK0_P_L
SIDE
TERM
C21
TO
D-BOARD
(D31)
R-UP
5V_DET
GND
GND
DOUTUC[23]
DOUTUB[23]
DOUTUA[23]
DOUTUC[22]
DOUTUB[22]
DOUTUA[22]
GND
DOUTUC[21]
DOUTUB[21]
DOUTUA[21]
DOUTUC[20]
DOUTUB[20]
DOUTUA[20]
GND
DOUTUC[19]
DOUTUB[19]
DOUTUA[19]
DOUTUC[18]
DOUTUB[18]
DOUTUA[18]
GND
CLK[3](-)_R
CLK[2](+)_R
GND
ODEU
CLRU
PCU2
LEU
GND
DOUTUC[17]
DOUTUB[17]
DOUTUA[17]
DOUTUC[16]
DOUTUB[16]
DOUTUA[16]
GND
DOUTUC[15]
DOUTUB[15]
DOUTUA[15]
DOUTUC[14]
DOUTUB[14]
DOUTUA[14]
GND
CLK[1](-)_R
CLK[0](+)_R
GND
DOUTUC[13]
DOUTUB[13]
DOUTUA[13]
DOUTUC[12]
DOUTUB[12]
DOUTUA[12]
GND
DOUTUC[11]
DOUTUB[11]
DOUTUA[11]
DOUTUC[10]
DOUTUB[10]
DOUTUA[10]
GND
DOUTUC[9]
DOUTUB[9]
DOUTUA[9]
DOUTUC[8]
DOUTUB[8]
DOUTUA[8]
GND
CLK[1](-)_L
CLK[0](+)_L
GND
DRV_RST
N.C
N.C
P5V
P5V
P5V
P5V
C2_5V
FL7201
J0HABH000013
①
②
③

TH-50PV60A
C2-Board (1 of 3) Schematic Diagram

5	6	7	8

14.43. C2-Board (2 of 3) Schematic Diagram

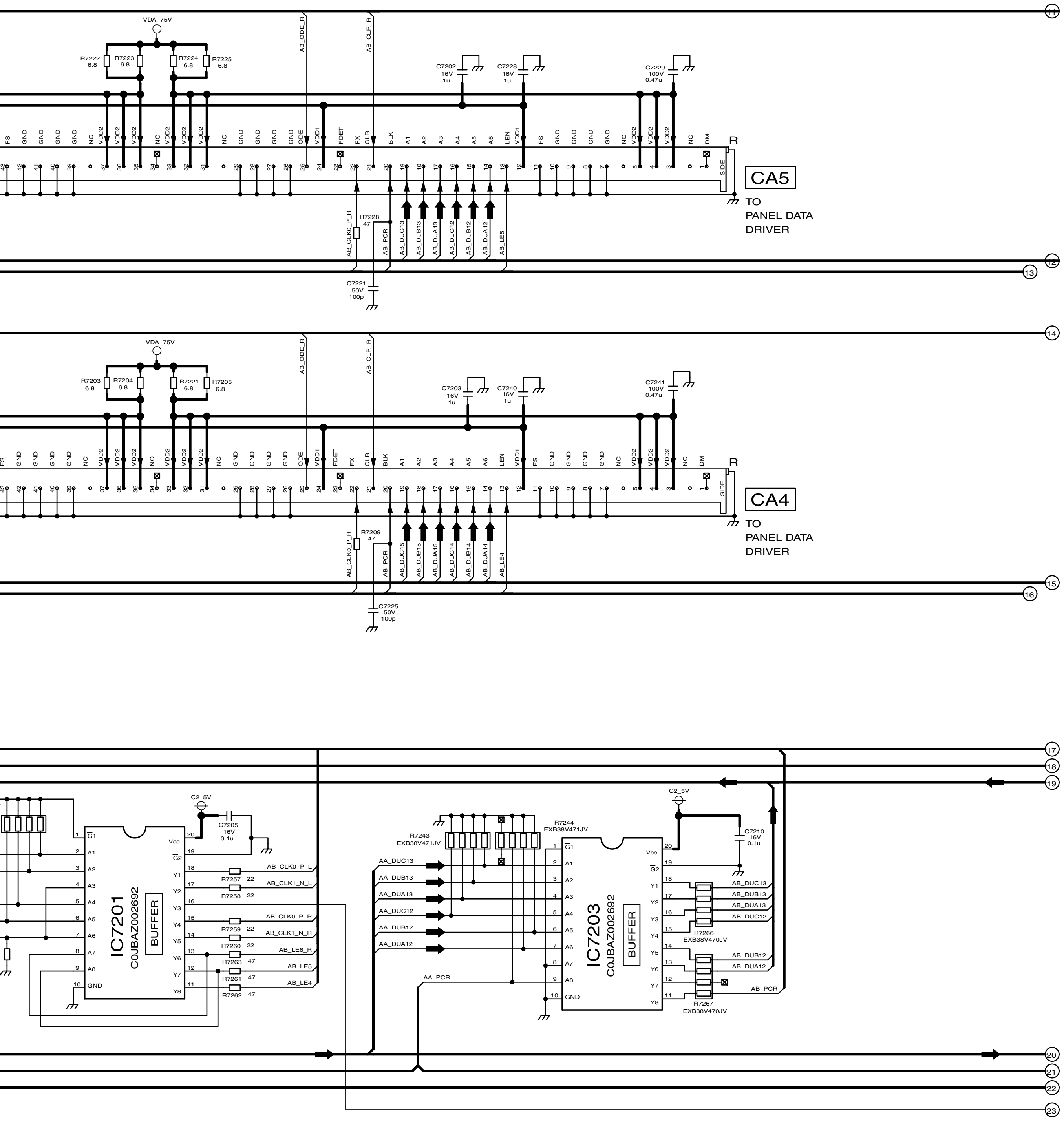
⚠ C2-BOARD TNPA3822 (2/3)



AB_ODE_R
AB_CLR_R
C7226
100V
0.47u
C2_5V
R7222
6.8
DM
NC
VDD2
GND
ODE
VDD1
FDET1
FX
CLR
BLK
A1
A2
A3
A4
A5
A6
LEN
FS
TERM
R7210
47
AB_CLK1_N_R
AB_PCR
AB_DUC13
AB_DUB13
AB_DUA13
AB_DUC12
AB_DUB12
AB_DUA12
AB_LE5
C7238
100V
0.47u
R7203
6.8
R7207
47
AB_DUC15
AB_DUB15
AB_DUA15
AB_DUC14
AB_DUB14
AB_DUA14
AB_LE4
R7241
EXB38V471JV
R7242
EXB38V471JV
AA_DUC15
AA_DUB15
AA_DUA15
AA_DUC14
AA_DUB14
AA_DUA14
AA_CLR_R
AA_ODE_R
G1
G2
Vcc
GND
IC7202
C0JBAZ002692
BUFFER
C7243
16V
0.1u
R7264
EXB38V470JV
R7265
EXB38V470JV
AB_CLR_R
AB_ODE_R
R7211
EXB38V471JV
AA_CLK0_P_L
AA_CLK1_N_L
AA_CLK0_P_R
AA_CLK1_N_R
AA_LER
R7201
10k
IC7201
1
2
3

TH-50PV60A
C2-Board (2 of 3) Schematic Diagram

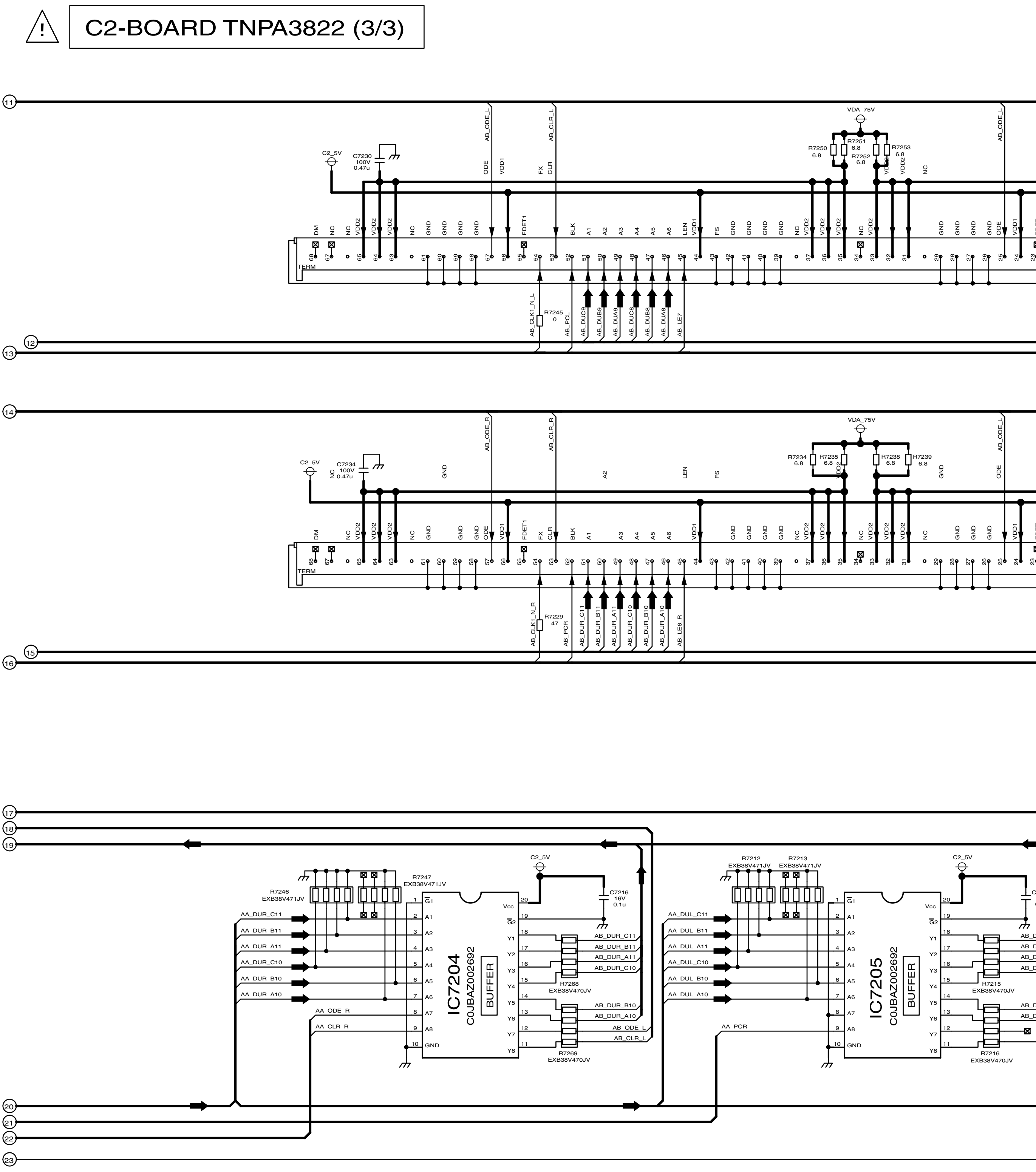
8 9 10 11


VDA_75V
R7222 6.8
R7223 6.8
R7224 6.8
R7225 6.8
AB_ODE_R
AB_CLR_R
C7202 16V 1u
C7228 16V 1u
C7229 100V 0.47u
FS
GND
NC
VDD2
ODE
VDD1
FDET
FX
CLR
BLK
A1
A2
A3
A4
A5
A6
LEN
DM
SIDE
R
CA5
TO
PANEL DATA
DRIVER
R7228 47
AB_CLK0_P_R
AB_PCR
AB_DUC13
AB_DUB13
AB_DUA13
AB_DUC12
AB_DUB12
AB_DUA12
AB_LE5
C7221 50V 100p
R7203 6.8
R7204 6.8
R7221 6.8
R7205 6.8
C7203 16V 1u
C7240 16V 1u
C7241 100V 0.47u
CA4
R7209 47
AB_DUC15
AB_DUB15
AB_DUA15
AB_DUC14
AB_DUB14
AB_DUA14
AB_LE4
C7225 50V 100p
C2_5V
C7205 16V 0.1u
IC7201
C0JBAZ002692
BUFFER
G1
A1
A2
A3
A4
A5
A6
A7
A8
GND
Vcc
G2
Y1
Y2
Y3
Y4
Y5
Y6
Y7
Y8
R7257 22
R7258 22
R7259 22
R7260 22
R7263 47
R7261 47
R7262 47
AB_CLK0_P_L
AB_CLK1_N_L
AB_CLK0_P_R
AB_CLK1_N_R
AB_LE6_R
AB_LE5
AB_LE4
R7243 EXB38V471JV
R7244 EXB38V471JV
AA_DUC13
AA_DUB13
AA_DUA13
AA_DUC12
AA_DUB12
AA_DUA12
AA_PCR
IC7203
C0JBAZ002692
BUFFER
C7210 16V 0.1u
R7266 EXB38V470JV
R7267 EXB38V470JV
AB_DUC13
AB_DUB13
AB_DUA13
AB_DUC12
AB_DUB12
AB_DUA12
AB_PCR
11
12
13
14
15
16
17
18
19
20
21
22
23

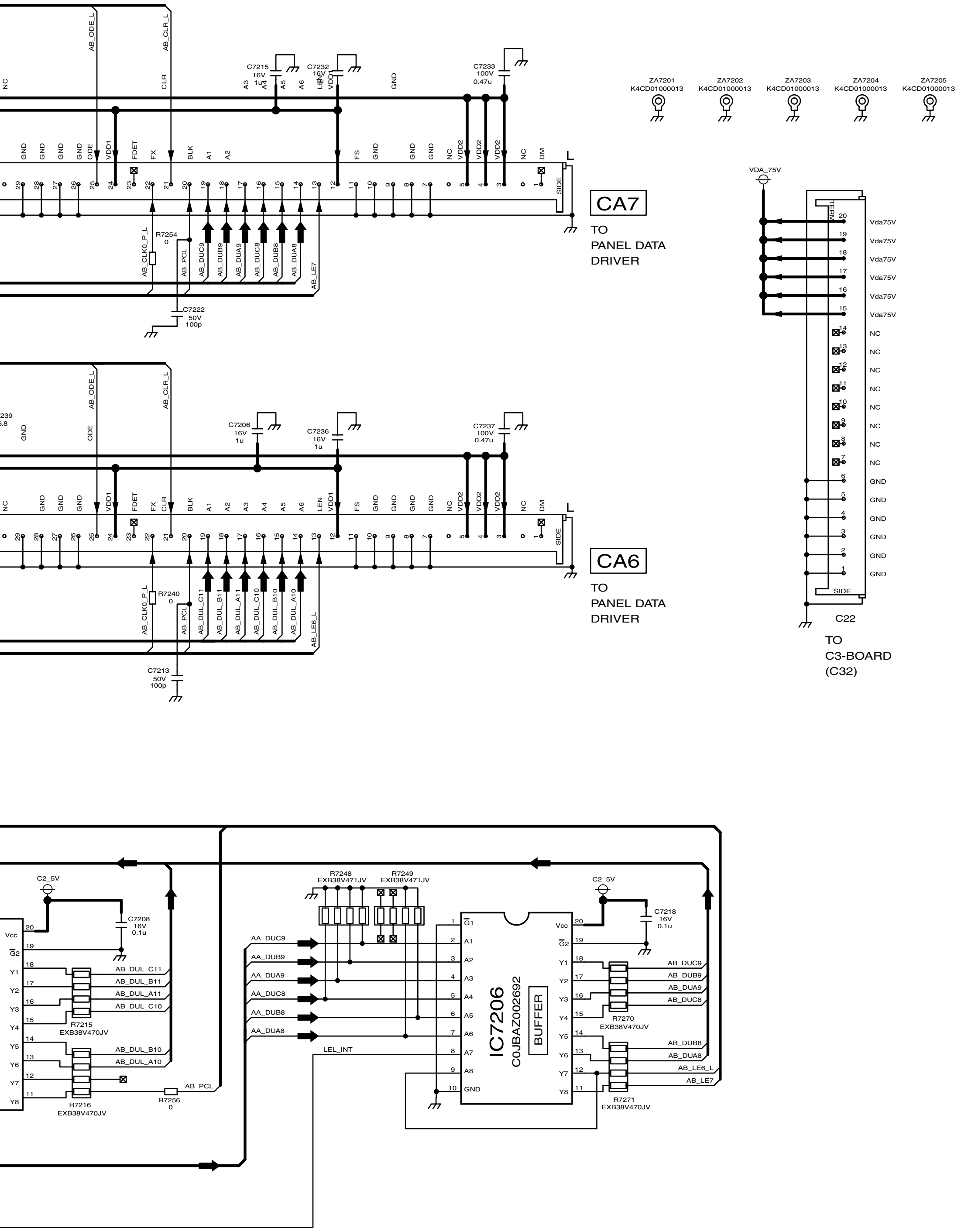
TH-50PV60A
C2-Board (2 of 3) Schematic Diagram

12 13 14 15

14.44. C2-Board (3 of 3) Schematic Diagram



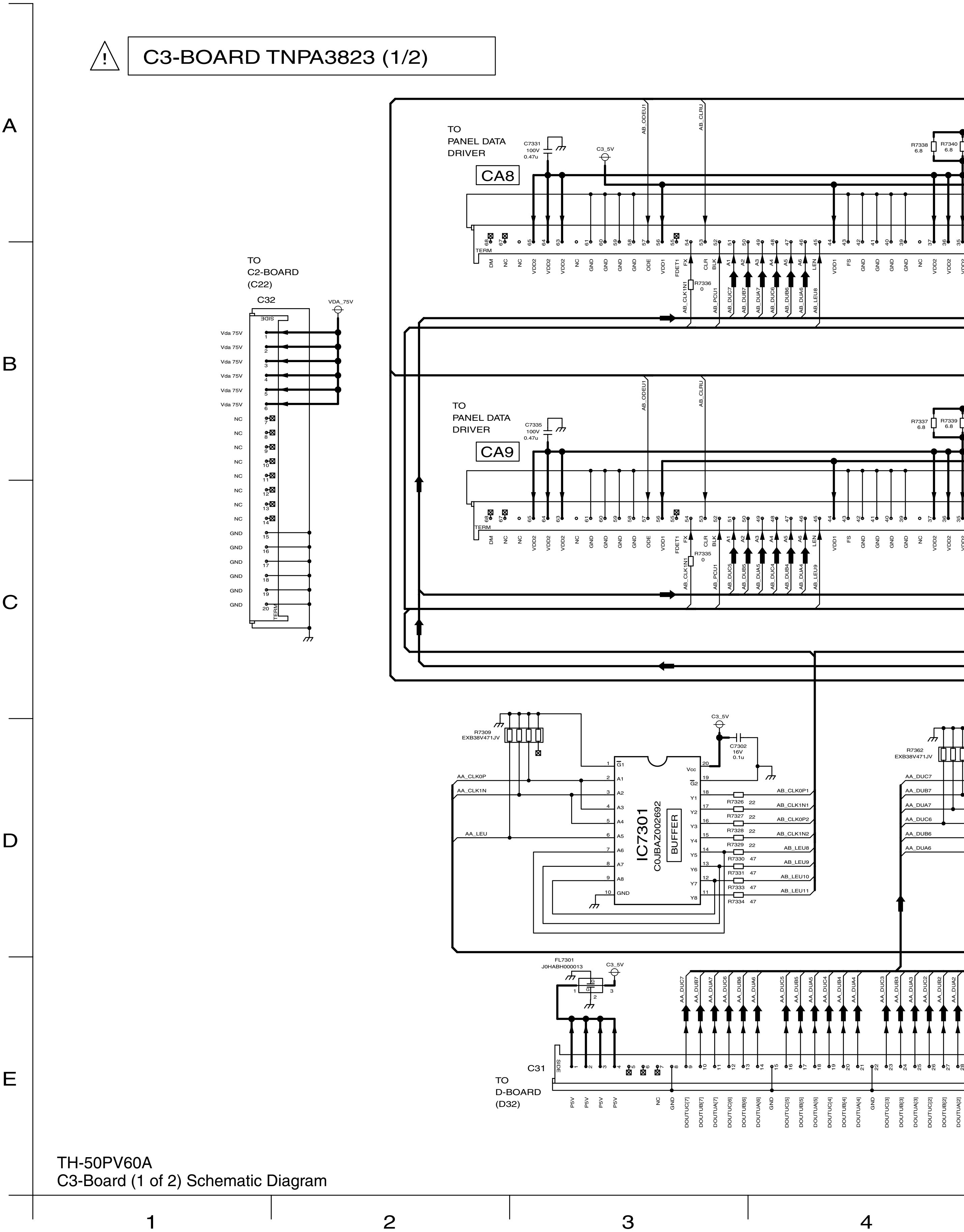
C2-BOARD TNPA3822 (3/3)
C2_5V
C7230 100V 0.47u
VDA_75V
R7250 6.8
R7251 6.8
R7252 6.8
R7253 6.8
AB_ODE_L
AB_CLR_L
TERM
DM
NC
VDD2
GND
ODE
VDD1
FDET1
FX
CLR
BLK
A1
A2
A3
A4
A5
A6
LEN
FS
R7245 0
AB_CLK1_N_L
AB_PCL
AB_DUC9
AB_DUB9
AB_DUA9
AB_DUC8
AB_DUB8
AB_DUA8
AB_LE7
C7234 100V 0.47u
R7234 6.8
R7235 6.8
R7238 6.8
R7239 6.8
AB_ODE_R
AB_CLR_R
R7229 47
AB_CLK1_N_R
AB_PCR
AB_DUR_C11
AB_DUR_B11
AB_DUR_A11
AB_DUR_C10
AB_DUR_B10
AB_DUR_A10
AB_LE6_R
R7246 EXB38V471JV
R7247 EXB38V471JV
AA_DUR_C11
AA_DUR_B11
AA_DUR_A11
AA_DUR_C10
AA_DUR_B10
AA_DUR_A10
AA_ODE_R
AA_CLR_R
C7216 16V 0.1u
IC7204
C0JBAZ002692
BUFFER
R7268 EXB38V470JV
R7269 EXB38V470JV
AB_ODE_L
AB_CLR_L
R7212 EXB38V471JV
R7213 EXB38V471JV
AA_DUL_C11
AA_DUL_B11
AA_DUL_A11
AA_DUL_C10
AA_DUL_B10
AA_DUL_A10
AA_PCR
IC7205
C0JBAZ002692
BUFFER
R7215 EXB38V470JV
R7216 EXB38V470JV
Vcc
GND
11
12
13
14
15
16
17
18
19
20
21
22
23


AB_ODE_L
AB_CLR_L
C7215 16V 1u
C7232 16V
C7233 100V 0.47u
ZA7201 K4CD01000013
ZA7202 K4CD01000013
ZA7203 K4CD01000013
ZA7204 K4CD01000013
ZA7205 K4CD01000013
CA7
TO
PANEL DATA
DRIVER
R7254 0
AB_CLK0_P_L
AB_PCL
AB_DUC9
AB_DUB9
AB_DUA9
AB_DUC8
AB_DUB8
AB_DUA8
AB_LE7
C7222 50V 100p
VDA_75V
Vda75V
NC
GND
TERM
SIDE
C22
TO
C3-BOARD
(C32)
C7206 16V 1u
C7236 16V 1u
C7237 100V 0.47u
CA6
TO
PANEL DATA
DRIVER
R7240 0
AB_DUL_C11
AB_DUL_B11
AB_DUL_A11
AB_DUL_C10
AB_DUL_B10
AB_DUL_A10
AB_LE6_L
C7213 50V 100p
C2_5V
C7208 16V 0.1u
R7215 EXB38V470JV
R7216 EXB38V470JV
R7256 0
AB_PCL
R7248 EXB38V471JV
R7249 EXB38V471JV
AA_DUC9
AA_DUB9
AA_DUA9
AA_DUC8
AA_DUB8
AA_DUA8
LEL_INT
IC7206
C0JBAZ002692
BUFFER
C7218 16V 0.1u
R7270 EXB38V470JV
R7271 EXB38V470JV
AB_DUC9
AB_DUB9
AB_DUA9
AB_DUC8
AB_DUB8
AB_DUA8
AB_LE6_L
AB_LE7

TH-50PV60A
C2-Board (3 of 3) Schematic Diagram

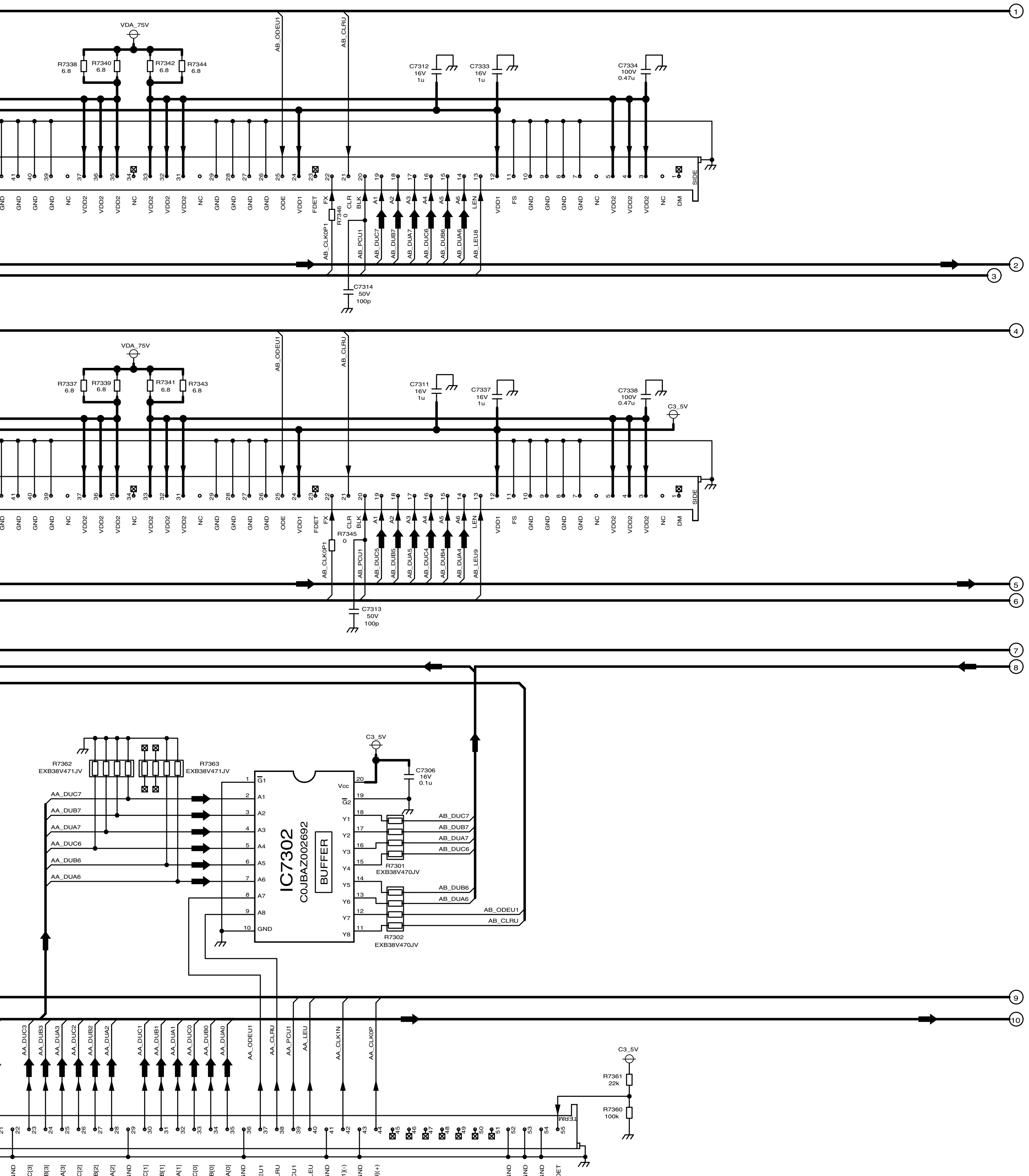
20 21 22 23

14.45. C3-Board (1 of 2) Schematic Diagram



C3-BOARD TNPA3823 (1/2)
A
B
C
D
E
1
2
3
4
TO PANEL DATA DRIVER
CA8
CA9
C7331 100V 0.47u
C7335 100V 0.47u
C3_5V
AB_ODEU1
AB_CLRU
R7338 6.8
R7340 6.8
R7337 6.8
R7339 6.8
TERM
DM
NC
VDD2
GND
ODE
VDD1
FDET1
FX
CLR
BLK
A1
A2
A3
A4
A5
A6
LEN
FS
R7336 0
R7335 0
AB_CLK1N1
AB_PCU1
AB_DUC7
AB_DUB7
AB_DUA7
AB_DUC6
AB_DUB6
AB_DUA6
AB_LEU8
AB_DUC5
AB_DUB5
AB_DUA5
AB_DUC4
AB_DUB4
AB_DUA4
AB_LEU9
TO C2-BOARD (C22)
C32
VDA_75V
SIDE
Vda 75V
NC
GND
TERM
R7309 EXB38V471JV
C7302 16V 0.1u
IC7301
C0JBAZ002692
BUFFER
G1
A1
A2
A3
A4
A5
A6
A7
A8
GND
Vcc
G2
Y1
Y2
Y3
Y4
Y5
Y6
Y7
Y8
AA_CLK0P
AA_CLK1N
AA_LEU
R7326 22
R7327 22
R7328 22
R7329 22
R7330 47
R7331 47
R7333 47
R7334 47
AB_CLK0P1
AB_CLK1N1
AB_CLK0P2
AB_CLK1N2
AB_LEU8
AB_LEU9
AB_LEU10
AB_LEU11
R7362 EXB38V471JV
AA_DUC7
AA_DUB7
AA_DUA7
AA_DUC6
AA_DUB6
AA_DUA6
FL7301 J0HABH000013
AA_DUC5
AA_DUB5
AA_DUA5
AA_DUC4
AA_DUB4
AA_DUA4
AA_DUC3
AA_DUB3
AA_DUA3
AA_DUC2
AA_DUB2
AA_DUA2
C31
TO D-BOARD (D32)
P5V
NC
GND
DOUTUC[7]
DOUTUB[7]
DOUTUA[7]
DOUTUC[6]
DOUTUB[6]
DOUTUA[6]
DOUTUC[5]
DOUTUB[5]
DOUTUA[5]
DOUTUC[4]
DOUTUB[4]
DOUTUA[4]
DOUTUC[3]
DOUTUB[3]
DOUTUA[3]
DOUTUC[2]
DOUTUB[2]
DOUTUA[2]

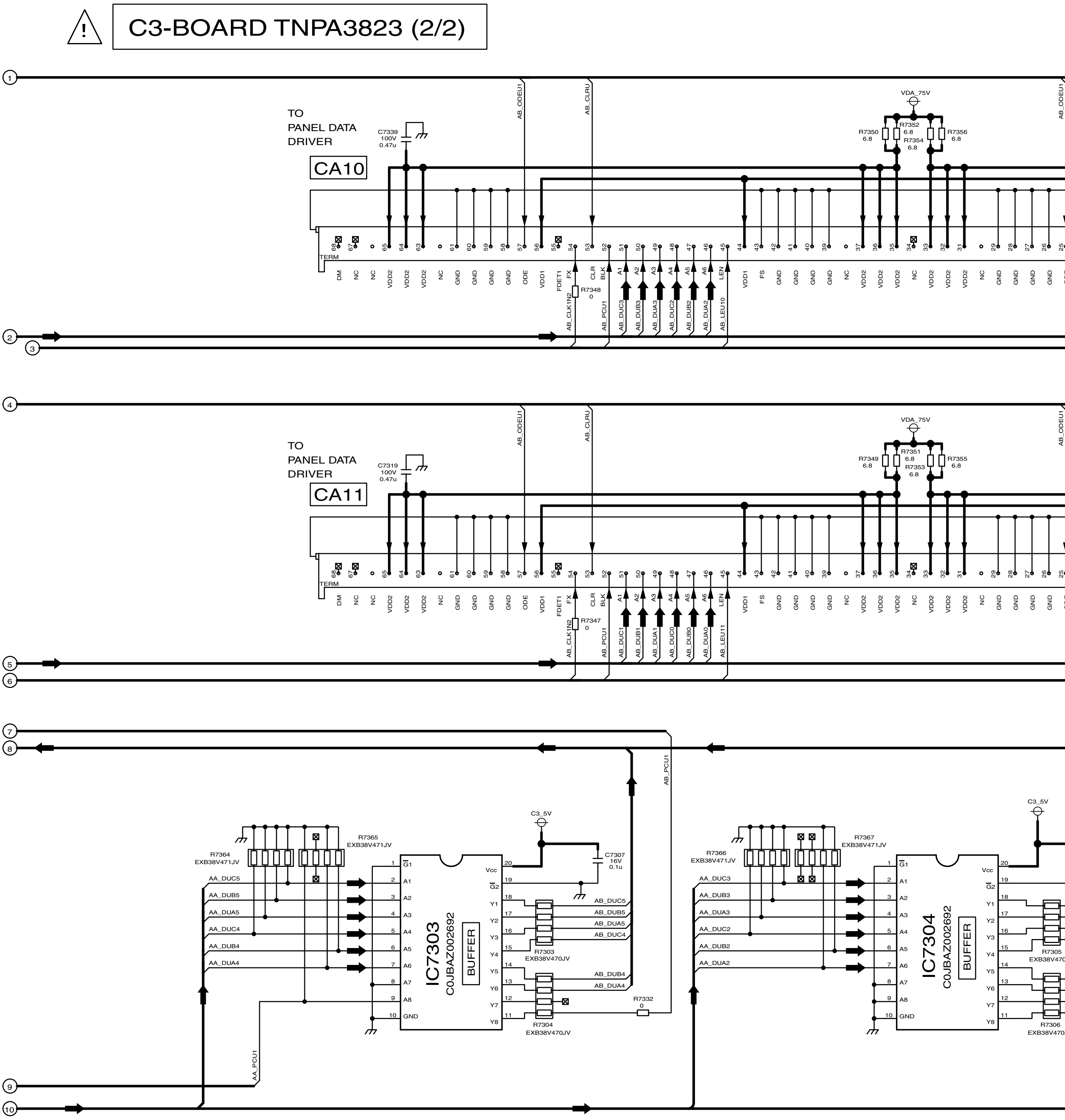
TH-50PV60A
C3-Board (1 of 2) Schematic Diagram


VDA_75V
R7338 6.8
R7340 6.8
R7342 6.8
R7344 6.8
AB_ODEU1
AB_CLRU
C7312 16V 1u
C7333 16V 1u
C7334 100V 0.47u
R7346 0
C7314 50V 100p
R7337 6.8
R7339 6.8
R7341 6.8
R7343 6.8
C7311 16V 1u
C7337 16V 1u
C7338 100V 0.47u
C3_5V
R7345 0
C7313 50V 100p
VDD2
VDD1
GND
NC
ODE
FDET
FX
CLR
BLK
LEN
FS
DM
SIDE
AB_CLK0P1
AB_PCU1
AB_LEU8
AB_LEU9
IC7302
C0JBAZ002692
BUFFER
R7362 EXB38V471JV
R7363 EXB38V471JV
R7301 EXB38V470JV
R7302 EXB38V470JV
C7306 16V 0.1u
AA_DUC7
AA_DUB7
AA_DUA7
AA_DUC6
AA_DUB6
AA_DUA6
AB_DUC7
AB_DUB7
AB_DUA7
AB_DUC6
AB_DUB6
AB_DUA6
AB_ODEU1
AB_CLRU
AA_ODEU1
AA_CLRU
AA_PCU1
AA_LEU
AA_CLK1N
AA_CLK0P
R7361 22k
R7360 100k
TERM
5V_DET
ODEU1
CLRU
PCU1
LEU
CLK[1](-)
CLK[0](+)
1
2
3
4
5
6
7
8
9
10

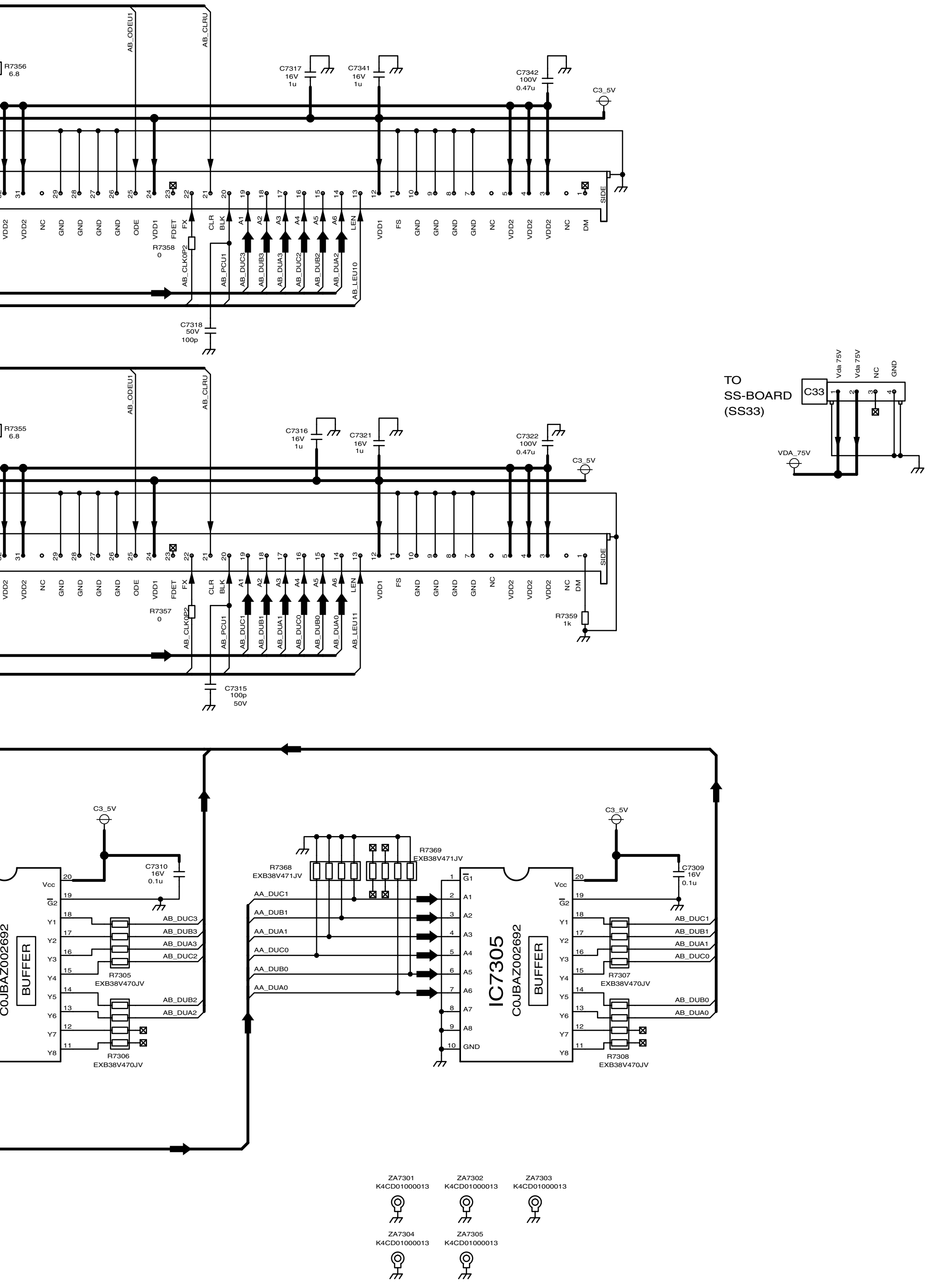
TH-50PV60A
C3-Board (1 of 2) Schematic Diagram

4 5 6 7 8

14.46. C3-Board (2 of 2) Schematic Diagram


C3-BOARD TNPA3823 (2/2)
TO
PANEL DATA
DRIVER
CA10
CA11
C7339
100V
0.47u
C7319
100V
0.47u
AB_ODEU1
AB_CLRU
VDA_75V
R7350
6.8
R7352
6.8
R7354
6.8
R7356
6.8
R7349
6.8
R7351
6.8
R7353
6.8
R7355
6.8
TERM
DM
NC
VDD2
GND
ODE
VDD1
FX
CLR
BLK
A1
A2
A3
A4
A5
A6
LEN
FS
FDET1
R7348
0
R7347
0
AB_CLK1N2
AB_PCU1
AB_DUC3
AB_DUB3
AB_DUA3
AB_DUC2
AB_DUB2
AB_DUA2
AB_LEU10
AB_DUC1
AB_DUB1
AB_DUA1
AB_DUC0
AB_DUB0
AB_DUA0
AB_LEU11
C3_5V
R7364
EXB38V471JV
R7365
EXB38V471JV
AA_DUC5
AA_DUB5
AA_DUA5
AA_DUC4
AA_DUB4
AA_DUA4
AA_PCU1
IC7303
C0JBAZ002692
BUFFER
G1
Vcc
G2
Y1
Y2
Y3
Y4
Y5
Y6
Y7
Y8
A7
A8
GND
C7307
16V
0.1u
AB_DUC5
AB_DUB5
AB_DUA5
AB_DUC4
AB_DUB4
AB_DUA4
R7303
EXB38V470JV
R7304
EXB38V470JV
R7332
0
R7366
EXB38V471JV
R7367
EXB38V471JV
AA_DUC3
AA_DUB3
AA_DUA3
AA_DUC2
AA_DUB2
AA_DUA2
IC7304
C0JBAZ002692
BUFFER
R7305
R7306
1
2
3
4
5
6
7
8
9
10

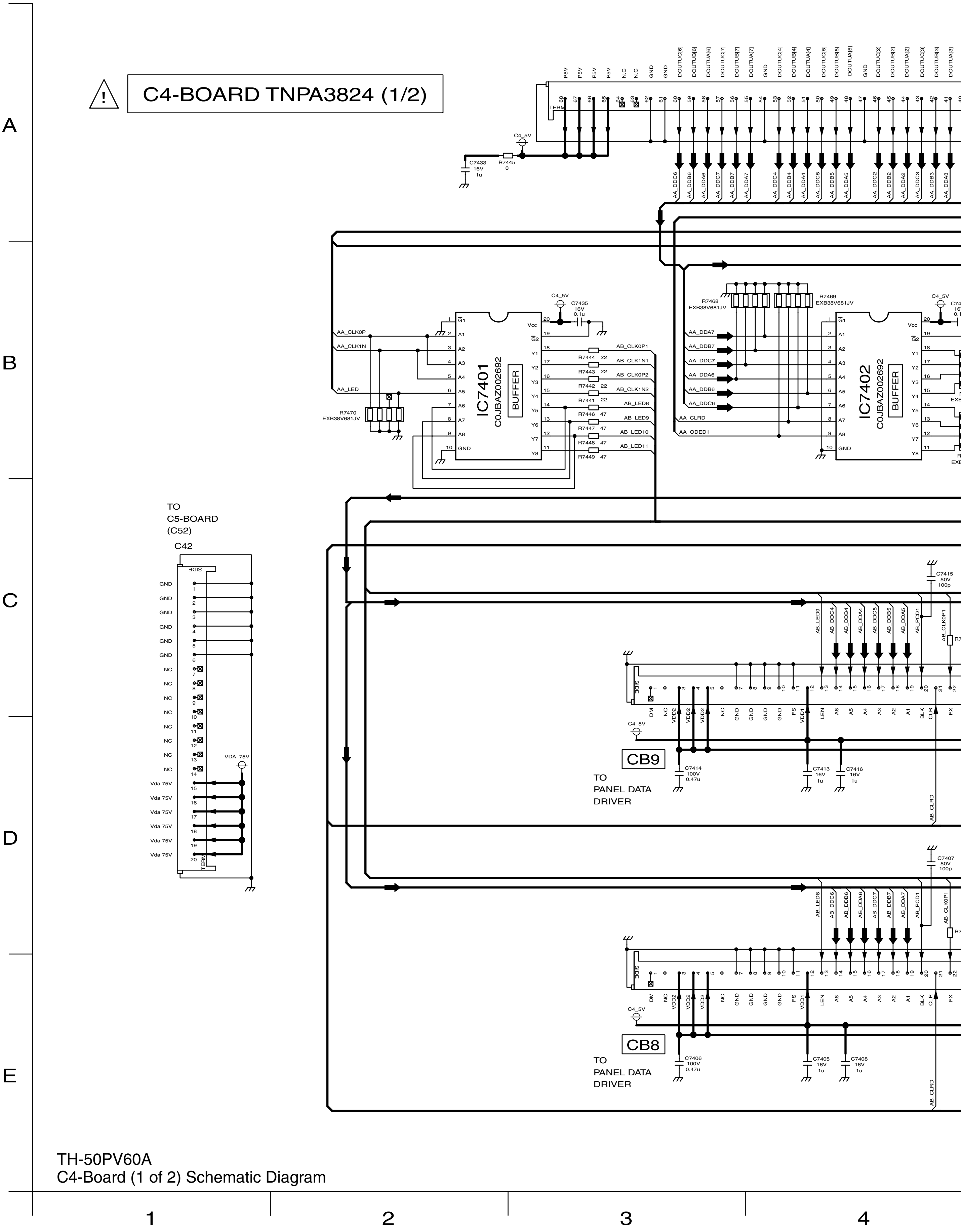
TH-50PV60A
C3-Board (2 of 2) Schematic Diagram


R7356
6.8
AB_ODEU1
AB_CLRU
C7317
16V
1u
C7341
16V
1u
C7342
100V
0.47u
C3_5V
VDD2
NC
GND
ODE
VDD1
FDET
FX
CLR
BLK
A1
A2
A3
A4
A5
A6
LEN
FS
DM
SIDE
R7358
0
AB_CLKGP2
AB_PCU1
AB_DUC3
AB_DUB3
AB_DUA3
AB_DUC2
AB_DUB2
AB_DUA2
AB_LEU10
C7318
50V
100p
TO
SS-BOARD
(SS33)
C33
Vda 75V
NC
GND
VDA_75V
R7355
6.8
C7316
16V
1u
C7321
16V
1u
C7322
100V
0.47u
R7357
0
R7359
1k
AB_DUC1
AB_DUB1
AB_DUA1
AB_DUC0
AB_DUB0
AB_DUA0
AB_LEU11
C7315
100p
50V
C7310
16V
0.1u
Vcc
G2
Y1
Y2
Y3
Y4
Y5
Y6
Y7
Y8
C0JBAZ002692
BUFFER
R7305
EXB38V470JV
R7306
EXB38V470JV
R7368
EXB38V471JV
R7369
EXB38V471JV
AA_DUC1
AA_DUB1
AA_DUA1
AA_DUC0
AA_DUB0
AA_DUA0
G1
A7
A8
IC7305
C7309
16V
0.1u
R7307
EXB38V470JV
R7308
EXB38V470JV
ZA7301
K4CD01000013
ZA7302
K4CD01000013
ZA7303
K4CD01000013
ZA7304
K4CD01000013
ZA7305
K4CD01000013

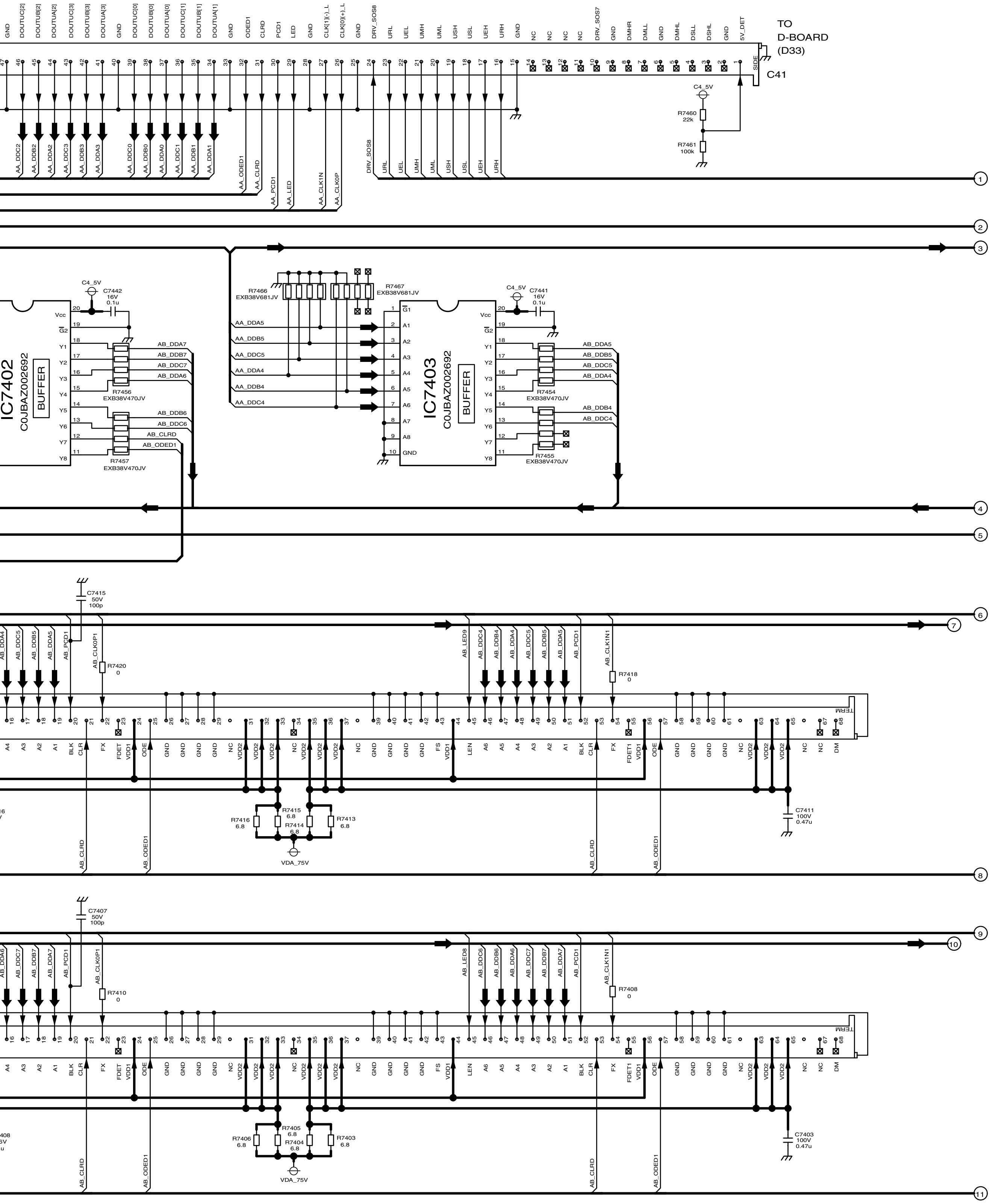
TH-50PV60A
C3-Board (2 of 2) Schematic Diagram

12	13	14	15

14.47. C4-Board (1 of 2) Schematic Diagram


C4-BOARD TNPA3824 (1/2)
A
B
C
D
E
1
2
3
4
P5V
N.C
GND
DOUTUC[6]
DOUTUB[6]
DOUTUA[6]
DOUTUC[7]
DOUTUB[7]
DOUTUA[7]
DOUTUC[4]
DOUTUB[4]
DOUTUA[4]
DOUTUC[5]
DOUTUB[5]
DOUTUA[5]
DOUTUC[2]
DOUTUB[2]
DOUTUA[2]
DOUTUC[3]
DOUTUB[3]
DOUTUA[3]
TERM
C4_5V
C7433 16V 1u
R7445 0
AA_DDC6
AA_DDB6
AA_DDA6
AA_DDC7
AA_DDB7
AA_DDA7
AA_DDC4
AA_DDB4
AA_DDA4
AA_DDC5
AA_DDB5
AA_DDA5
AA_DDC2
AA_DDB2
AA_DDA2
AA_DDC3
AA_DDB3
AA_DDA3
AA_CLK0P
AA_CLK1N
AA_LED
R7470 EXB38V681JV
C7435 16V 0.1u
IC7401
C0JBAZ002692
BUFFER
AB_CLK0P1
AB_CLK1N1
AB_CLK0P2
AB_CLK1N2
AB_LED8
AB_LED9
AB_LED10
AB_LED11
R7444 22
R7443 22
R7442 22
R7441 22
R7446 47
R7447 47
R7448 47
R7449 47
R7468 EXB38V681JV
R7469 EXB38V681JV
AA_DDA7
AA_DDB7
AA_DDC7
AA_DDA6
AA_DDB6
AA_DDC6
AA_CLRD
AA_ODED1
IC7402
C0JBAZ002692
BUFFER
TO
C5-BOARD
(C52)
C42
GND
NC
Vda 75V
VDA_75V
SIDE
TERM
C7415 50V 100p
AB_LED9
AB_DDC4
AB_DDB4
AB_DDA4
AB_DDC5
AB_DDB5
AB_DDA5
AB_PCD1
AB_CLK0P1
DM
NC
VDD2
GND
FS
VDD1
LEN
A6
A5
A4
A3
A2
A1
BLK
CLR
FX
C4_5V
CB9
TO
PANEL DATA
DRIVER
C7414 100V 0.47u
C7413 16V 1u
C7416 16V 1u
AB_CLRD
C7407 50V 100p
AB_LED8
AB_DDC6
AB_DDB6
AB_DDA6
AB_DDC7
AB_DDB7
AB_DDA7
AB_PCD1
AB_CLK0P1
CB8
TO
PANEL DATA
DRIVER
C7406 100V 0.47u
C7405 16V 1u
C7408 16V 1u
AB_CLRD

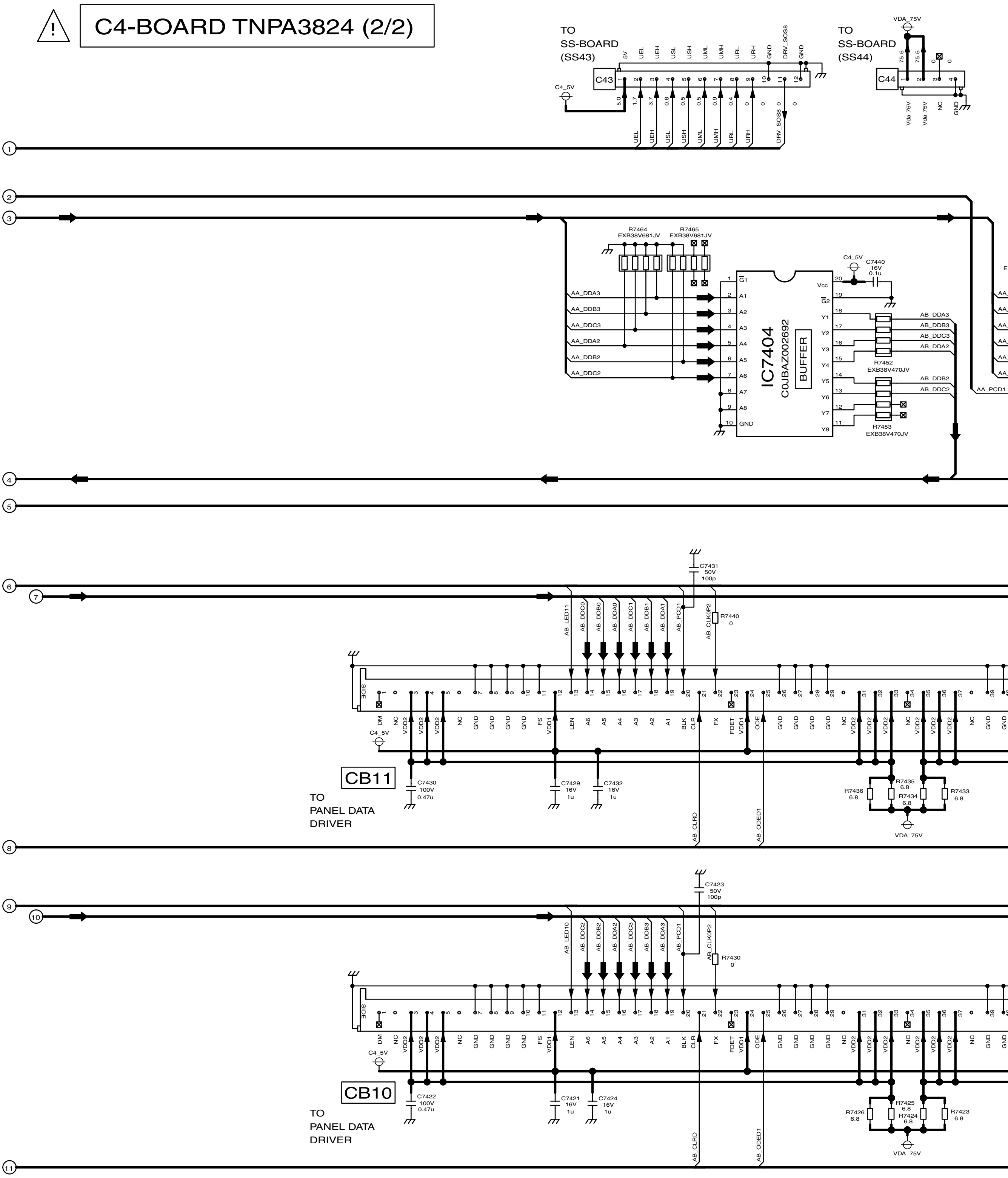
TH-50PV60A
C4-Board (1 of 2) Schematic Diagram

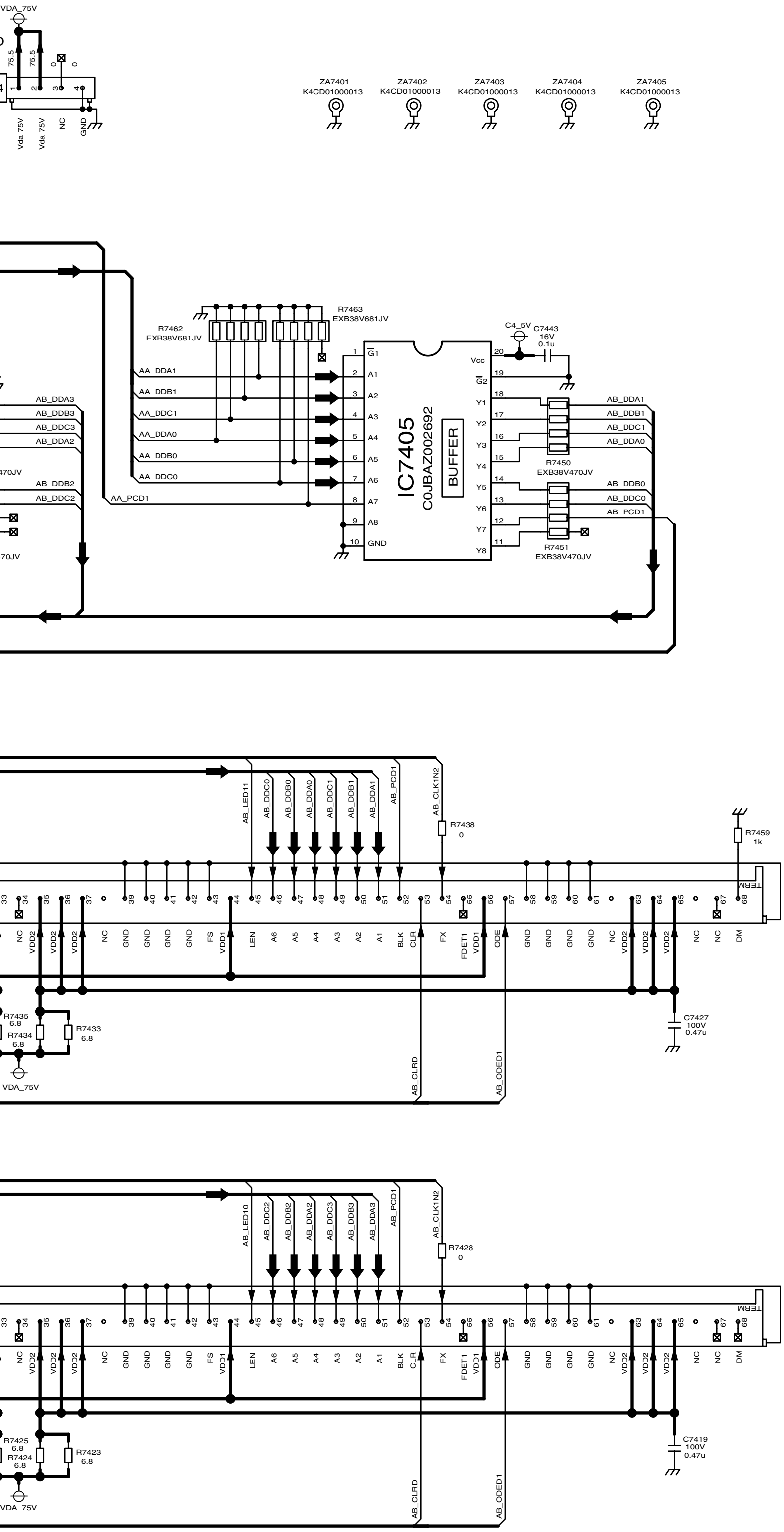

TO
D-BOARD
(D33)
C41
SIDE
C4_5V
R7460
22k
R7461
100k
5V_DET
DRV_SOS8
DRV_SOS7
R7466
EXB38V681JV
R7467
EXB38V681JV
IC7402
C0JBAZ002692
BUFFER
C7442
16V
0.1u
R7456
EXB38V470JV
R7457
EXB38V470JV
IC7403
C0JBAZ002692
BUFFER
C7441
16V
0.1u
R7454
EXB38V470JV
R7455
EXB38V470JV
C7415
50V
100p
R7420
0
R7418
0
R7416
6.8
R7415
6.8
R7414
6.8
R7413
6.8
VDA_75V
C7411
100V
0.47u
TERM
C7407
50V
100p
R7410
0
R7408
0
R7406
6.8
R7405
6.8
R7404
6.8
R7403
6.8
VDA_75V
C7403
100V
0.47u
AB_CLRD
AB_ODED1
①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪

TH-50PV60A
C4-Board (1 of 2) Schematic Diagram

4 5 6 7 8

14.48. C4-Board (2 of 2) Schematic Diagram


C4-BOARD TNPA3824 (2/2)
TO SS-BOARD (SS43)
C43
TO SS-BOARD (SS44)
C44
VDA_75V
C4_5V
R7464 EXB38V681JV
R7465 EXB38V681JV
IC7404
C0JBAZ002692
BUFFER
C7440 16V 0.1u
R7452 EXB38V470JV
R7453 EXB38V470JV
AA_DDA3
AA_DDB3
AA_DDC3
AA_DDA2
AA_DDB2
AA_DDC2
AB_DDA3
AB_DDB3
AB_DDC3
AB_DDA2
AB_DDB2
AB_DDC2
AA_PCD1
C7431 50V 100p
R7440 0
CB11
TO PANEL DATA DRIVER
C7430 100V 0.47u
C7429 16V 1u
C7432 16V 1u
R7436 6.8
R7435 6.8
R7434 6.8
R7433 6.8
AB_CLRD
AB_ODED1
C7423 50V 100p
R7430 0
CB10
TO PANEL DATA DRIVER
C7422 100V 0.47u
C7421 16V 1u
C7424 16V 1u
R7426 6.8
R7425 6.8
R7424 6.8
R7423 6.8
1
2
3
4
5
6
7
8
9
10
11


VDA_75V
ZA7401
K4CD01000013
ZA7402
K4CD01000013
ZA7403
K4CD01000013
ZA7404
K4CD01000013
ZA7405
K4CD01000013
R7462
EXB38V681JV
R7463
EXB38V681JV
IC7405
C0JBAZ00292
BUFFER
C4_5V
C7443
16V
0.1u
R7450
EXB38V470JV
R7451
EXB38V470JV
AA_DDA1
AA_DDB1
AA_DDC1
AA_DDA0
AA_DDB0
AA_DDC0
AA_PCD1
AB_DDA3
AB_DDB3
AB_DDC3
AB_DDA2
AB_DDB2
AB_DDC2
AB_DDA1
AB_DDB1
AB_DDC1
AB_DDA0
AB_DDB0
AB_DDC0
AB_PCD1
AB_LED11
AB_LED10
AB_CLK1N2
R7438
0
R7428
0
R7459
1k
TERM
C7427
100V
0.47u
C7419
100V
0.47u
R7435
6.8
R7434
6.8
R7433
6.8
R7425
6.8
R7424
6.8
R7423
6.8
AB_CLRD
AB_ODED1

TH-50PV60A
C4-Board (2 of 2) Schematic Diagram

12
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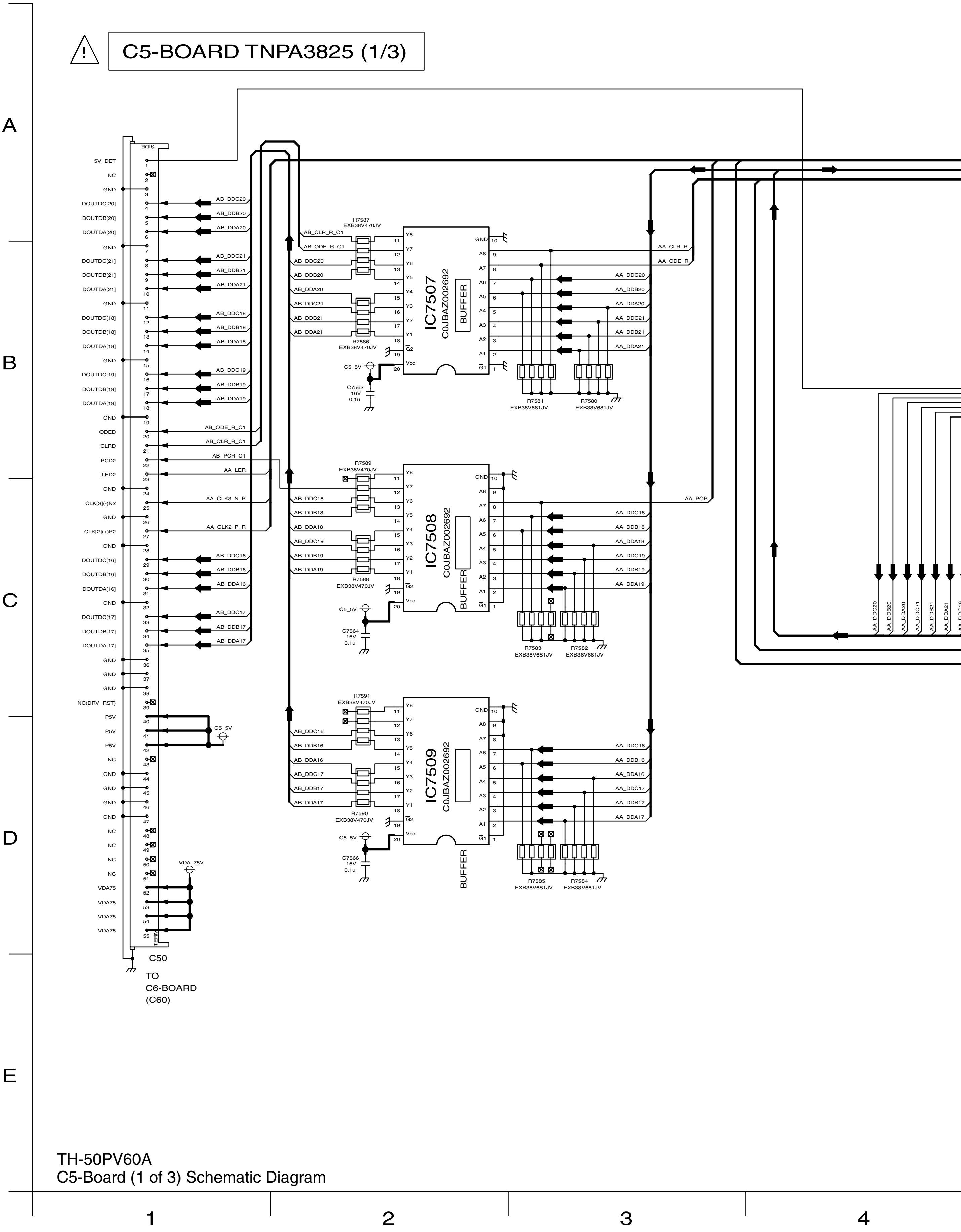
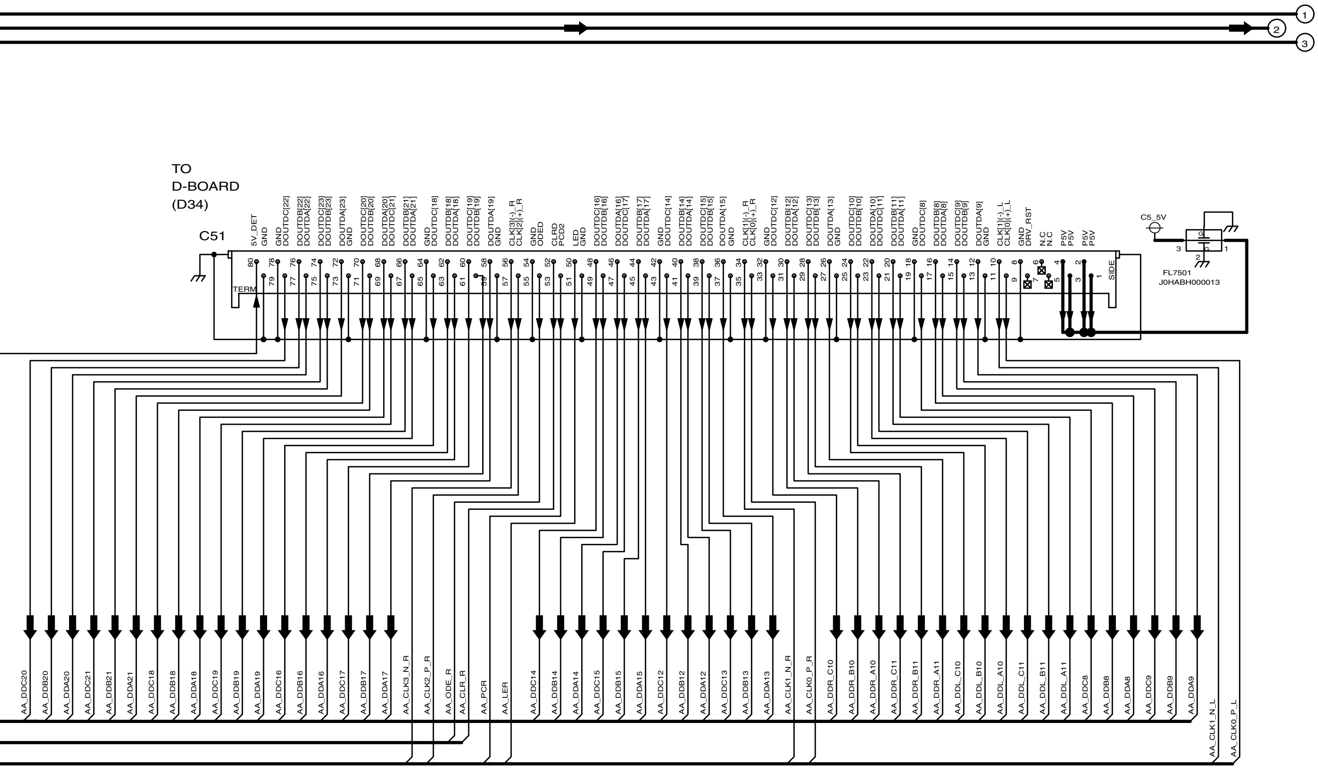
14
15

14.49. C5-Board (1 of 3) Schematic Diagram


C5-BOARD TNPA3825 (1/3)
A
B
C
D
E
1
2
3
4
SIDE
5V_DET
NC
GND
DOUTDC[20]
DOUTDB[20]
DOUTDA[20]
DOUTDC[21]
DOUTDB[21]
DOUTDA[21]
DOUTDC[18]
DOUTDB[18]
DOUTDA[18]
DOUTDC[19]
DOUTDB[19]
DOUTDA[19]
ODED
CLRD
PCD2
LED2
CLK[3](-)N2
CLK[2](+)P2
DOUTDC[16]
DOUTDB[16]
DOUTDA[16]
DOUTDC[17]
DOUTDB[17]
DOUTDA[17]
NC(DRV_RST)
P5V
VDA75
TERM
C50
TO
C6-BOARD
(C60)
C5_5V
VDA_75V
AB_DDC20
AB_DDB20
AB_DDA20
AB_DDC21
AB_DDB21
AB_DDA21
AB_DDC18
AB_DDB18
AB_DDA18
AB_DDC19
AB_DDB19
AB_DDA19
AB_ODE_R_C1
AB_CLR_R_C1
AB_PCR_C1
AA_LER
AA_CLK3_N_R
AA_CLK2_P_R
AB_DDC16
AB_DDB16
AB_DDA16
AB_DDC17
AB_DDB17
AB_DDA17
R7587
EXB38V470JV
R7586
EXB38V470JV
R7589
EXB38V470JV
R7588
EXB38V470JV
R7591
EXB38V470JV
R7590
EXB38V470JV
IC7507
IC7508
IC7509
C0JBAZ002692
BUFFER
Y8
Y7
Y6
Y5
Y4
Y3
Y2
Y1
G2
Vcc
GND
A8
A7
A6
A5
A4
A3
A2
A1
G1
C7562
16V
0.1u
C7564
16V
0.1u
C7566
16V
0.1u
R7581
EXB38V681JV
R7580
EXB38V681JV
R7583
EXB38V681JV
R7582
EXB38V681JV
R7585
EXB38V681JV
R7584
EXB38V681JV
AA_CLR_R
AA_ODE_R
AA_PCR
AA_DDC20
AA_DDB20
AA_DDA20
AA_DDC21
AA_DDB21
AA_DDA21
AA_DDC18
AA_DDB18
AA_DDA18
AA_DDC19
AA_DDB19
AA_DDA19
AA_DDC16
AA_DDB16
AA_DDA16
AA_DDC17
AA_DDB17
AA_DDA17

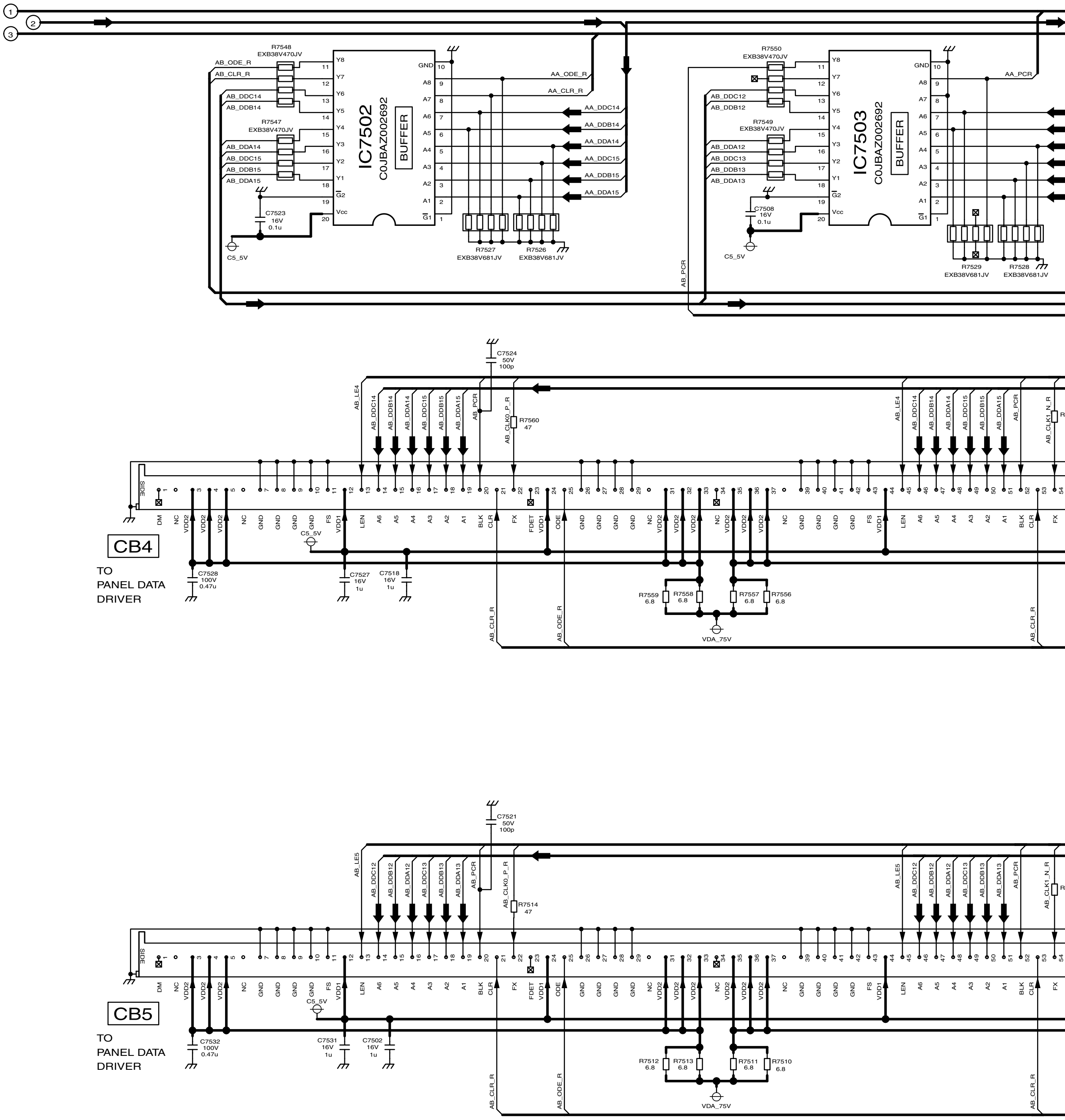
TH-50PV60A
C5-Board (1 of 3) Schematic Diagram


TO
D-BOARD
(D34)
C51
TERM
SIDE
C5_5V
FL7501
J0HABH000013
AA_DDC20
AA_DDB20
AA_DDA20
AA_DDC21
AA_DDB21
AA_DDA21
AA_DDC18
AA_DDB18
AA_DDA18
AA_DDC19
AA_DDB19
AA_DDA19
AA_DDC16
AA_DDB16
AA_DDA16
AA_DDC17
AA_DDB17
AA_DDA17
AA_CLK3_N_R
AA_CLK2_P_R
AA_ODE_R
AA_CLR_R
AA_PCR
AA_LER
AA_DDC14
AA_DDB14
AA_DDA14
AA_DDC15
AA_DDB15
AA_DDA15
AA_DDC12
AA_DDB12
AA_DDA12
AA_DDC13
AA_DDB13
AA_DDA13
AA_CLK1_N_R
AA_CLK0_P_R
AA_DDR_C10
AA_DDR_B10
AA_DDR_A10
AA_DDR_C11
AA_DDR_B11
AA_DDR_A11
AA_DDL_C10
AA_DDL_B10
AA_DDL_A10
AA_DDL_C11
AA_DDL_B11
AA_DDL_A11
AA_DDC8
AA_DDB8
AA_DDA8
AA_DDC9
AA_DDB9
AA_DDA9
AA_CLK1_N_L
AA_CLK0_P_L

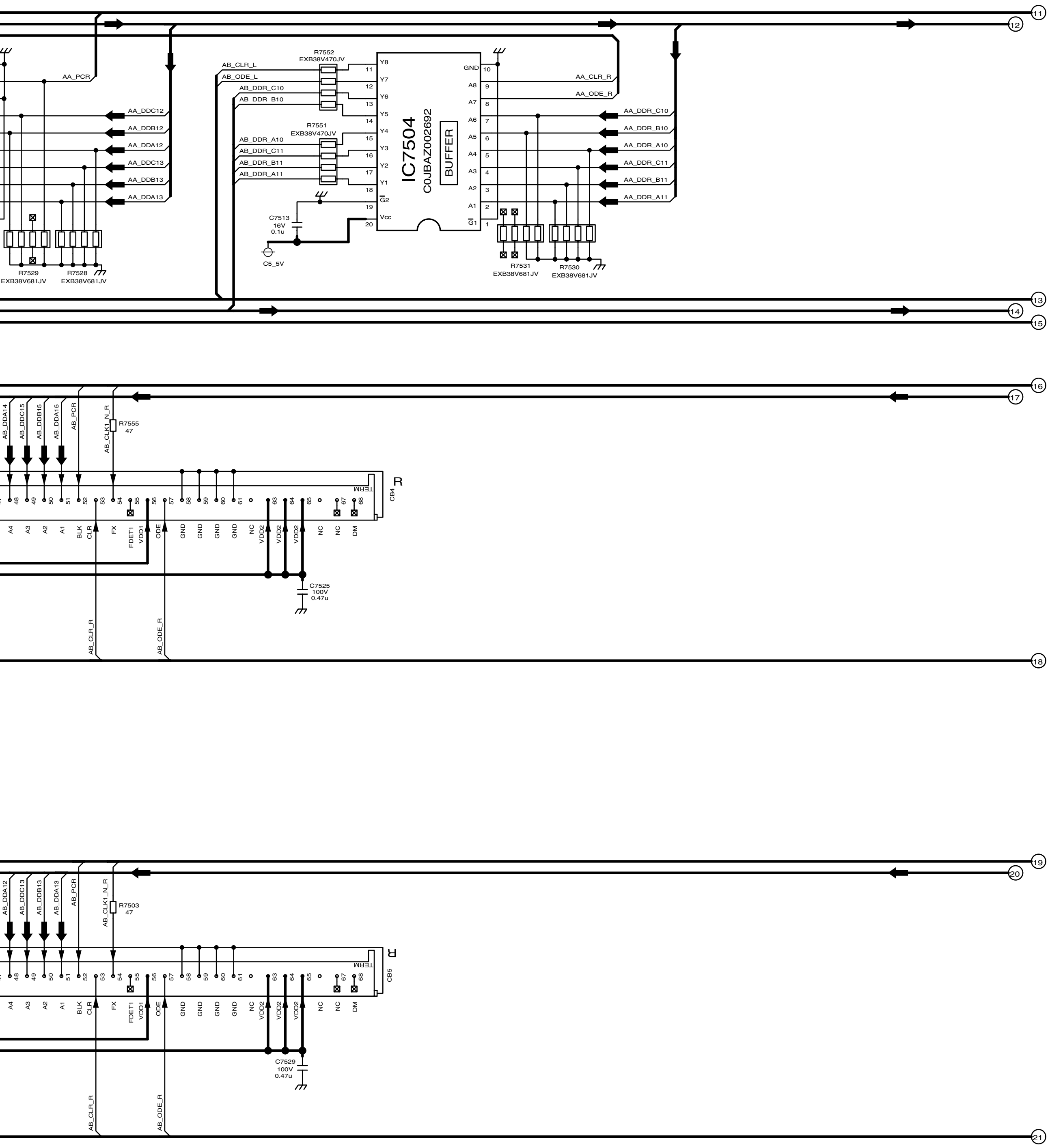
TH-50PV60A
C5-Board (1 of 3) Schematic Diagram

14.50. C5-Board (2 of 3) Schematic Diagram

⚠ C5-BOARD TNPA3825 (2/3)



1
2
3
R7548
EXB38V470JV
AB_ODE_R
AB_CLR_R
AB_DDC14
AB_DDB14
R7547
EXB38V470JV
AB_DDA14
AB_DDC15
AB_DDB15
AB_DDA15
IC7502
C0JBAZ002692
BUFFER
Y8
Y7
Y6
Y5
Y4
Y3
Y2
Y1
G2
Vcc
GND
A8
A7
A6
A5
A4
A3
A2
A1
G1
AA_ODE_R
AA_CLR_R
AA_DDC14
AA_DDB14
AA_DDA14
AA_DDC15
AA_DDB15
AA_DDA15
C7523
16V
0.1u
C5_5V
R7527
EXB38V681JV
R7526
EXB38V681JV
R7550
EXB38V470JV
AB_DDC12
AB_DDB12
R7549
EXB38V470JV
AB_DDA12
AB_DDC13
AB_DDB13
AB_DDA13
IC7503
C0JBAZ002692
BUFFER
AA_PCR
C7508
16V
0.1u
C5_5V
R7529
EXB38V681JV
R7528
EXB38V681JV
AB_PCR
C7524
50V
100p
AB_LE4
AB_DDC14
AB_DDB14
AB_DDA14
AB_DDC15
AB_DDB15
AB_DDA15
AB_PCR
AB_CLK0_P_R
R7560
47
AB_CLK1_N_R
SIDE
DM
NC
VDD2
NC
GND
FS
VDD1
LEN
A6
A5
A4
A3
A2
A1
BLK
CLR
FX
FDET
ODE
CB4
TO
PANEL DATA
DRIVER
C7528
100V
0.47u
C5_5V
C7527
16V
1u
C7518
16V
1u
R7559
6.8
R7558
6.8
R7557
6.8
R7556
6.8
VDA_75V
AB_CLR_R
AB_ODE_R
C7521
50V
100p
AB_LE5
AB_DDC12
AB_DDB12
AB_DDA12
AB_DDC13
AB_DDB13
AB_DDA13
AB_CLK0_P_R
R7514
47
CB5
TO
PANEL DATA
DRIVER
C7532
100V
0.47u
C7531
16V
1u
C7502
16V
1u
R7512
6.8
R7513
6.8
R7511
6.8
R7510
6.8
VDA_75V

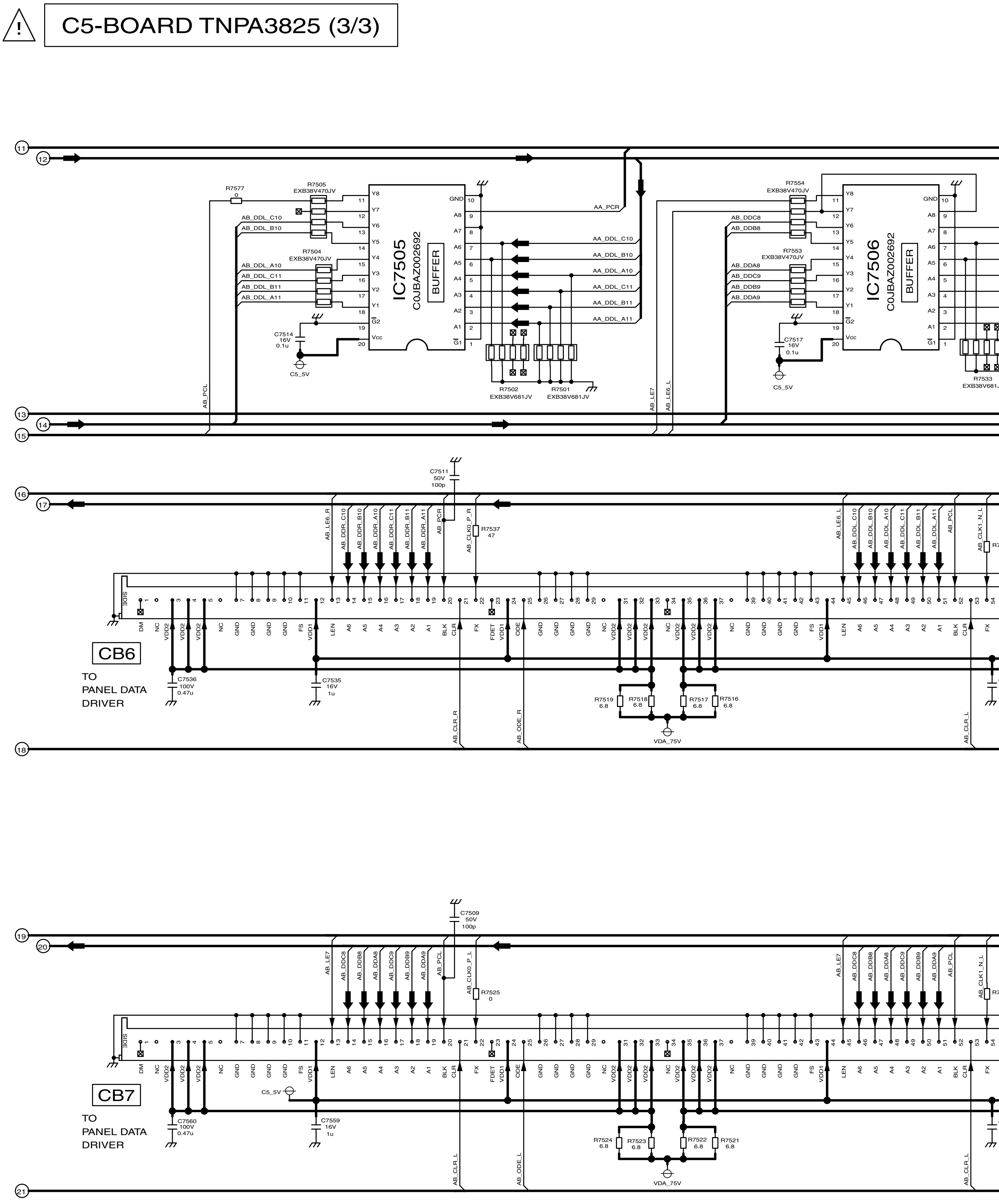


IC7504
C0JBAZ002692
BUFFER
R7552
EXB38V470JV
R7551
EXB38V470JV
AB_CLR_L
AB_ODE_L
AB_DDR_C10
AB_DDR_B10
AB_DDR_A10
AB_DDR_C11
AB_DDR_B11
AB_DDR_A11
Y8
Y7
Y6
Y5
Y4
Y3
Y2
Y1
G2
Vcc
GND
A8
A7
A6
A5
A4
A3
A2
A1
G1
C7513
16V
0.1u
C5_5V
AA_CLR_R
AA_ODE_R
AA_DDR_C10
AA_DDR_B10
AA_DDR_A10
AA_DDR_C11
AA_DDR_B11
AA_DDR_A11
R7531
EXB38V681JV
R7530
EXB38V681JV
AA_PCR
AA_DDC12
AA_DDB12
AA_DDA12
AA_DDC13
AA_DDB13
AA_DDA13
R7529
EXB38V681JV
R7528
EXB38V681JV
AB_DDA14
AB_DDC15
AB_DDB15
AB_DDA15
AB_PCR
AB_CLK1_N_R
R7555
47
CB4
TERM
R
A4
A3
A2
A1
BLK
CLR
FX
FDET1
VDD1
ODE
GND
NC
VDD2
DM
C7525
100V
0.47u
AB_CLR_R
AB_ODE_R
AB_DDA12
AB_DDC13
AB_DDB13
AB_DDA13
AB_PCR
AB_CLK1_N_R
R7503
47
CB5
C7529
100V
0.47u
⑪
⑫
⑬
⑭
⑮
⑯
⑰
⑱
⑲
⑳
㉑

TH-50PV60A
C5-Board (2 of 3) Schematic Diagram

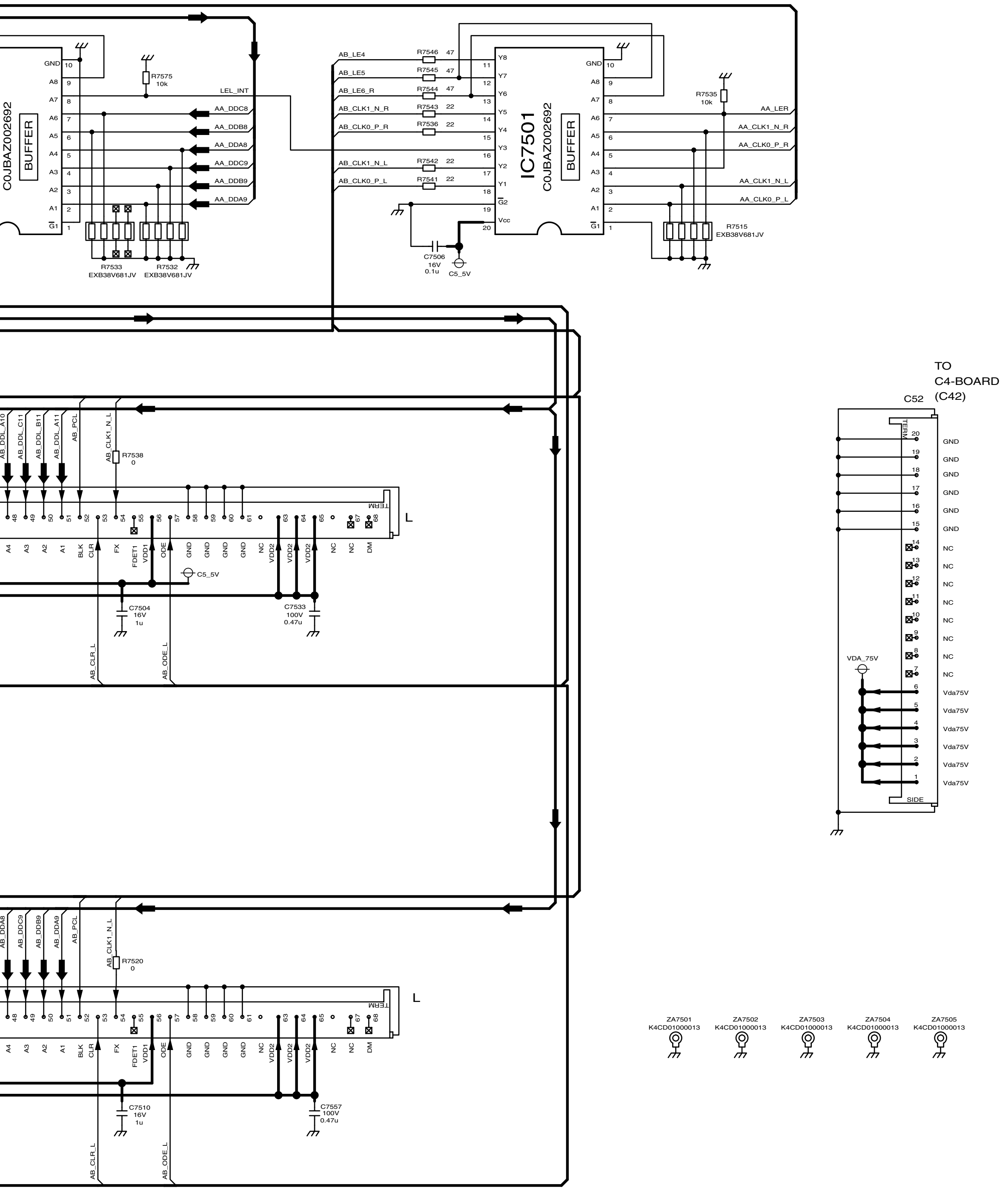
12 13 14 15

14.51. C5-Board (3 of 3) Schematic Diagram


C5-BOARD TNPA3825 (3/3)
IC7505
C0JBAZ002692
BUFFER
IC7506
C0JBAZ002692
BUFFER
R7577 0
R7505 EXB38V470JV
R7504 EXB38V470JV
R7554 EXB38V470JV
R7553 EXB38V470JV
R7502 EXB38V681JV
R7501 EXB38V681JV
R7533 EXB38V681J
C7514 16V 0.1u
C7517 16V 0.1u
C5_5V
AA_PCR
AA_DDL_C10
AA_DDL_B10
AA_DDL_A10
AA_DDL_C11
AA_DDL_B11
AA_DDL_A11
AB_DDL_C10
AB_DDL_B10
AB_DDL_A10
AB_DDL_C11
AB_DDL_B11
AB_DDL_A11
AB_DDC8
AB_DDB8
AB_DDA8
AB_DDC9
AB_DDB9
AB_DDA9
AB_PCL
AB_LE7
AB_LE6_L
C7511 50V 100p
C7509 50V 100p
AB_LE6_R
AB_DDR_C10
AB_DDR_B10
AB_DDR_A10
AB_DDR_C11
AB_DDR_B11
AB_DDR_A11
AB_PCR
AB_CLK0_P_R
AB_CLK0_P_L
AB_CLK1_N_L
R7537 47
R7525 0
CB6
CB7
TO PANEL DATA DRIVER
SIDE
DM NC VDD2 VDD2 VDD2 NC GND GND GND GND FS VDD1 LEN A6 A5 A4 A3 A2 A1 BLK CLR FX FDET VDD1 ODE GND GND GND GND NC VDD2 VDD2 VDD2 NC VDD2 VDD2 VDD2 NC GND GND GND GND FS VDD1 LEN A6 A5 A4 A3 A2 A1 BLK CLR FX
C7536 100V 0.47u
C7535 16V 1u
C7560 100V 0.47u
C7559 16V 1u
R7519 6.8
R7518 6.8
R7517 6.8
R7516 6.8
R7524 6.8
R7523 6.8
R7522 6.8
R7521 6.8
VDA_75V
AB_CLR_R
AB_ODE_R
AB_CLR_L
AB_ODE_L
11
12
13
14
15
16
17
18
19
20
21

TH-50PV60A
C5-Board (3 of 3) Schematic Diagram

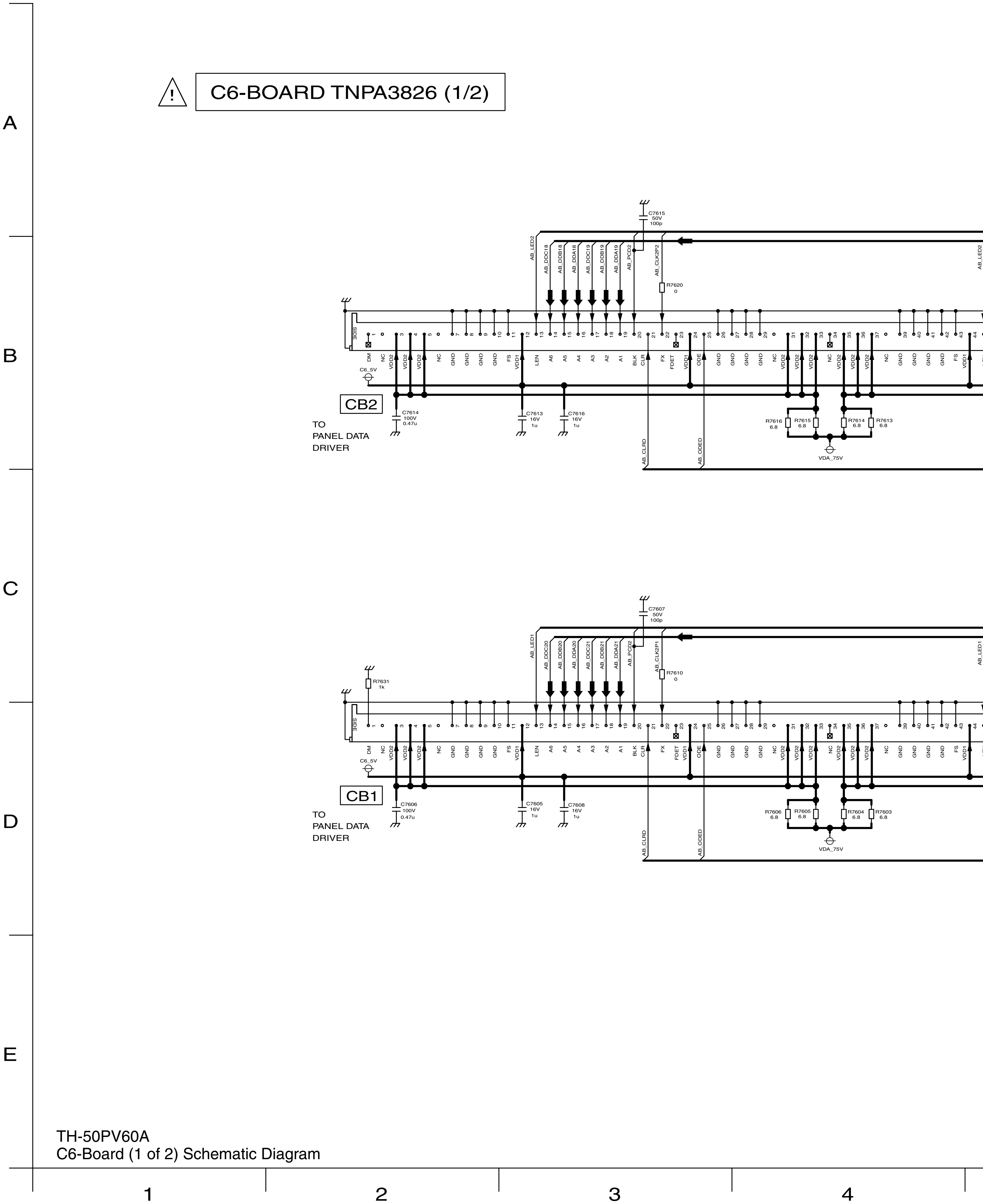
16 17 18 19


IC7501
C0JBAZ002692
BUFFER
GND
A8
A7
A6
A5
A4
A3
A2
A1
G1
G2
Vcc
Y1
Y2
Y3
Y4
Y5
Y6
Y7
Y8
R7575
10k
LEL_INT
AA_DDC8
AA_DDB8
AA_DDA8
AA_DDC9
AA_DDB9
AA_DDA9
R7533
EXB38V681JV
R7532
EXB38V681JV
AB_LE4
AB_LE5
AB_LE6_R
AB_CLK1_N_R
AB_CLK0_P_R
AB_CLK1_N_L
AB_CLK0_P_L
R7546
R7545
R7544
R7543
R7536
R7542
R7541
47
22
C7506
16V
0.1u
C5_5V
R7535
10k
AA_LER
AA_CLK1_N_R
AA_CLK0_P_R
AA_CLK1_N_L
AA_CLK0_P_L
R7515
EXB38V681JV
AB_DDL_A10
AB_DDL_C11
AB_DDL_B11
AB_DDL_A11
AB_PCL
AB_CLK1_N_L
R7538
0
TERM
L
A4
A3
A2
A1
BLK
CLR
FX
FDET1
VDD1
ODE
GND
NC
VDD2
DM
C7504
16V
1u
C7533
100V
0.47u
AB_CLR_L
AB_ODE_L
AB_DDA8
AB_DDC9
AB_DDB9
AB_DDA9
R7520
0
C7510
16V
1u
C7557
100V
0.47u
TO
C4-BOARD
(C42)
C52
SIDE
Vda75V
VDA_75V
ZA7501
ZA7502
ZA7503
ZA7504
ZA7505
K4CD01000013

TH-50PV60A
C5-Board (3 of 3) Schematic Diagram

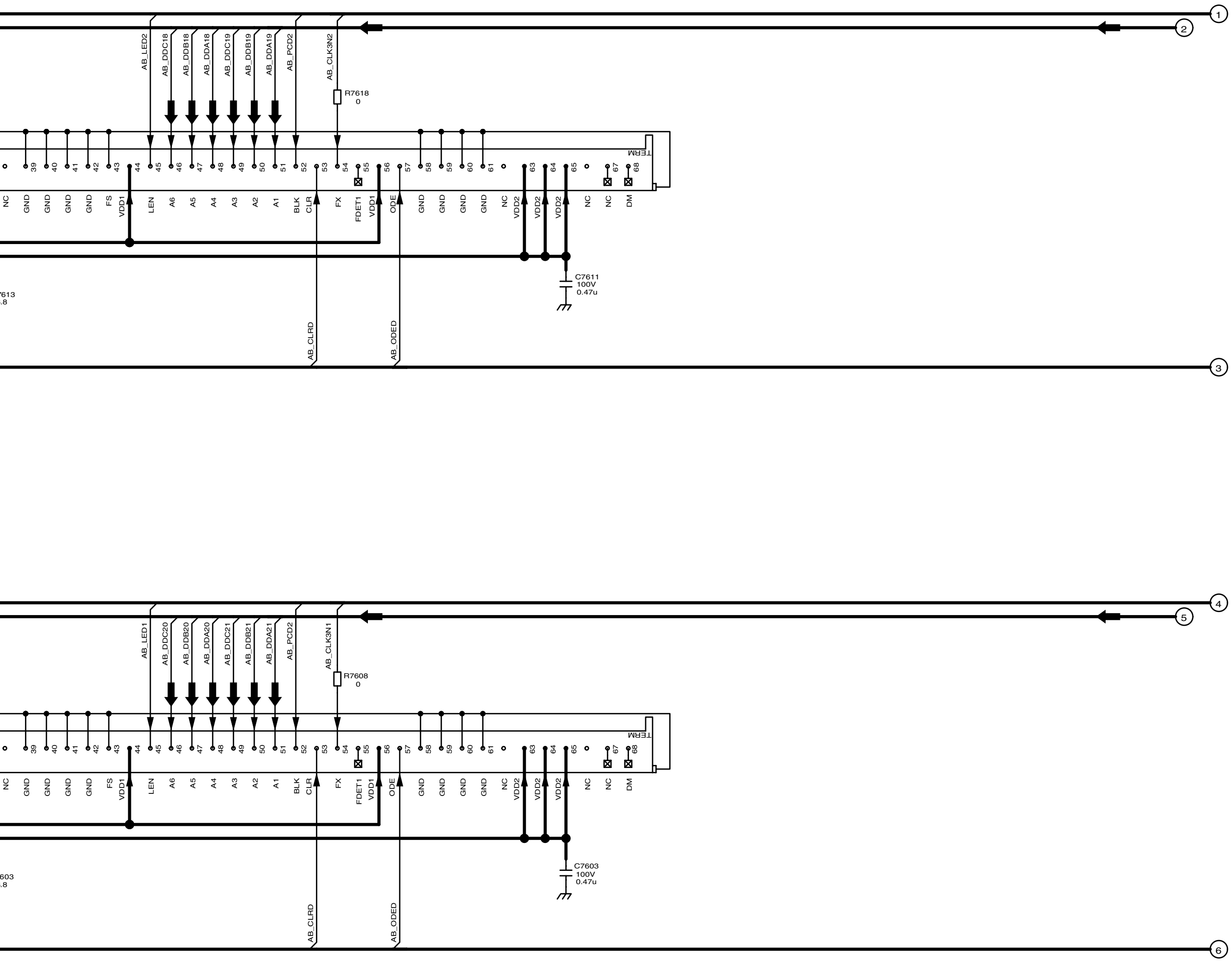
9 20 21 22 23

14.52. C6-Board (1 of 2) Schematic Diagram



A
B
C
D
E
1
2
3
4
C6-BOARD TNPA3826 (1/2)
CB2
CB1
TO
PANEL DATA
DRIVER
C6_5V
VDA_75V
C7615 50V 100p
C7607 50V 100p
C7614 100V 0.47u
C7613 16V 1u
C7616 16V 1u
C7606 100V 0.47u
C7605 16V 1u
C7608 16V 1u
R7620 0
R7610 0
R7631 1k
R7616 6.8
R7615 6.8
R7614 6.8
R7613 6.8
R7606 6.8
R7605 6.8
R7604 6.8
R7603 6.8
AB_LED2
AB_LED1
AB_DDC18
AB_DDB18
AB_DDA18
AB_DDC19
AB_DDB19
AB_DDA19
AB_DDC20
AB_DDB20
AB_DDA20
AB_DDC21
AB_DDB21
AB_DDA21
AB_PCD2
AB_CLK2P2
AB_CLK2P1
AB_CLRD
AB_ODED
SIDE
DM
NC
VDD2
GND
FS
VDD1
LEN
A6
A5
A4
A3
A2
A1
BLK
CLR
FX
FDET
ODE

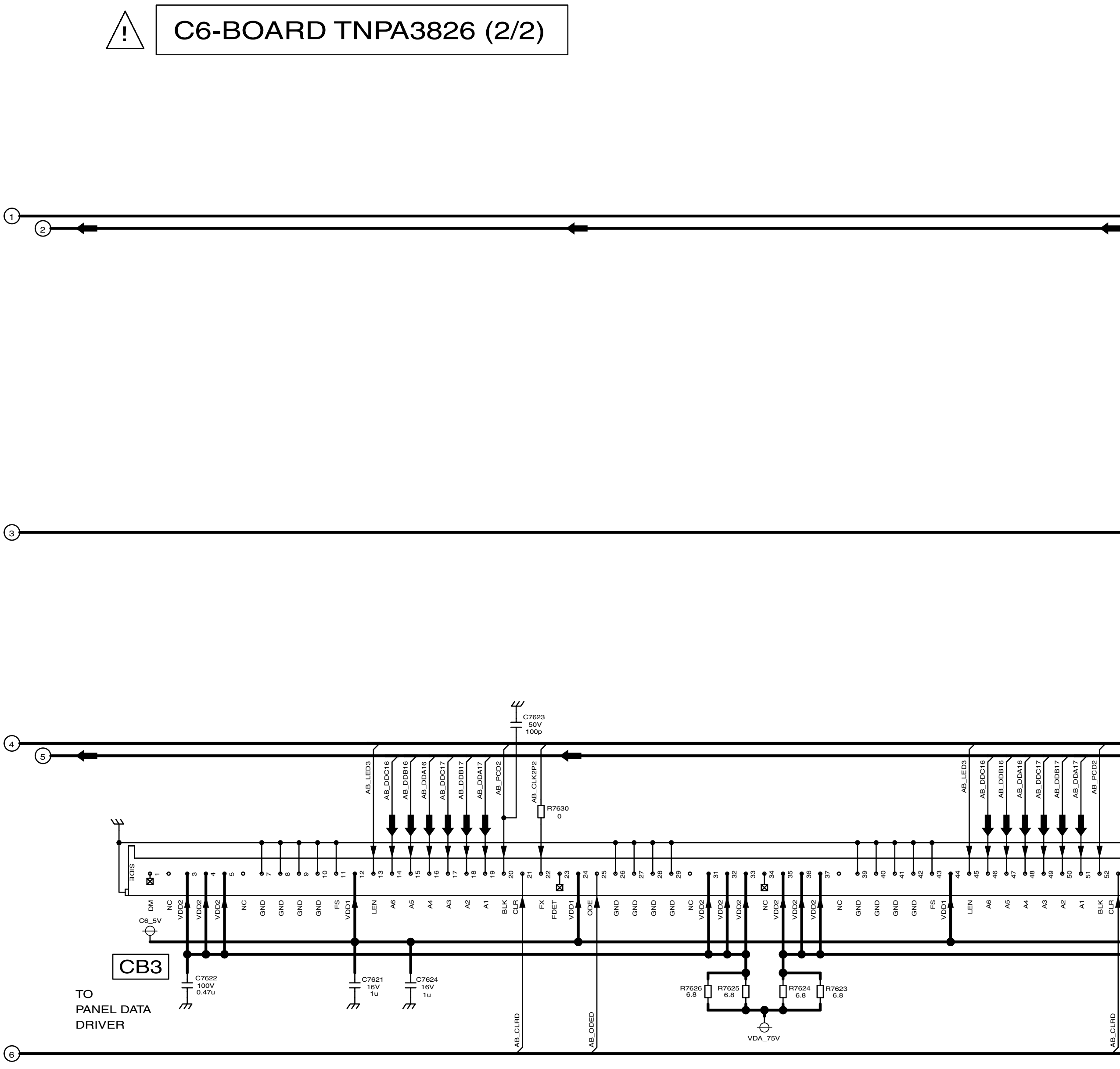
TH-50PV60A
C6-Board (1 of 2) Schematic Diagram


AB_LED2
AB_DDC18
AB_DDB18
AB_DDA18
AB_DDC19
AB_DDB19
AB_DDA19
AB_PCD2
AB_CLK3N2
R7618
0
TERM
39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 63 64 65 67 68
NC GND GND GND GND FS VDD1 LEN A6 A5 A4 A3 A2 A1 BLK CLR FX FDET1 VDD1 ODE GND GND GND GND NC VDD2 VDD2 VDD2 NC NC DM
7613
.8
C7611
100V
0.47u
AB_CLRD
AB_ODED
①
②
③
AB_LED1
AB_DDC20
AB_DDB20
AB_DDA20
AB_DDC21
AB_DDB21
AB_DDA21
AB_PCD2
AB_CLK3N1
R7608
0
TERM
39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 63 64 65 67 68
NC GND GND GND GND FS VDD1 LEN A6 A5 A4 A3 A2 A1 BLK CLR FX FDET1 VDD1 ODE GND GND GND GND NC VDD2 VDD2 VDD2 NC NC DM
603
.8
C7603
100V
0.47u
AB_CLRD
AB_ODED
④
⑤
⑥

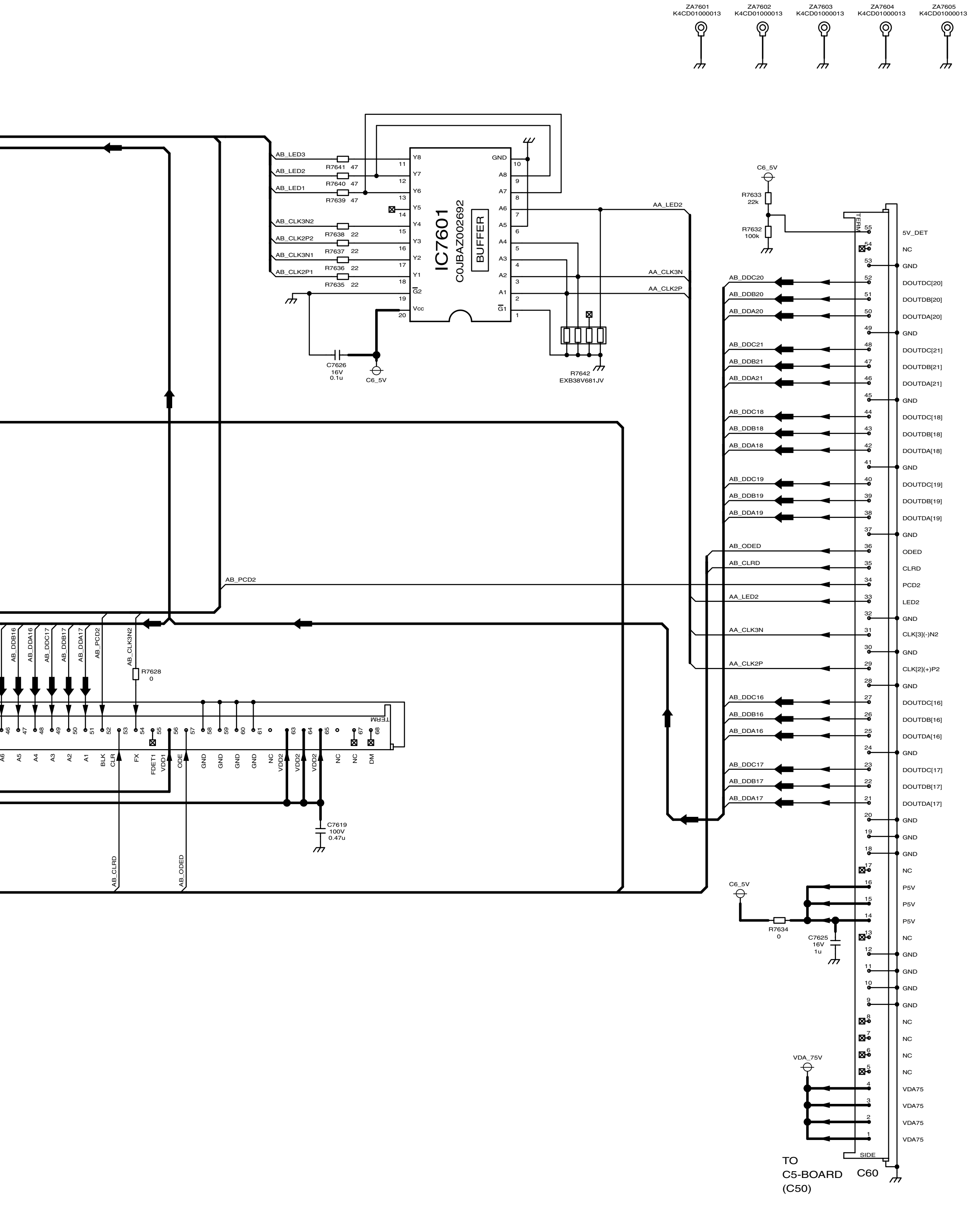
TH-50PV60A
C6-Board (1 of 2) Schematic Diagram

5 6 7 8

14.53. C6-Board (2 of 2) Schematic Diagram



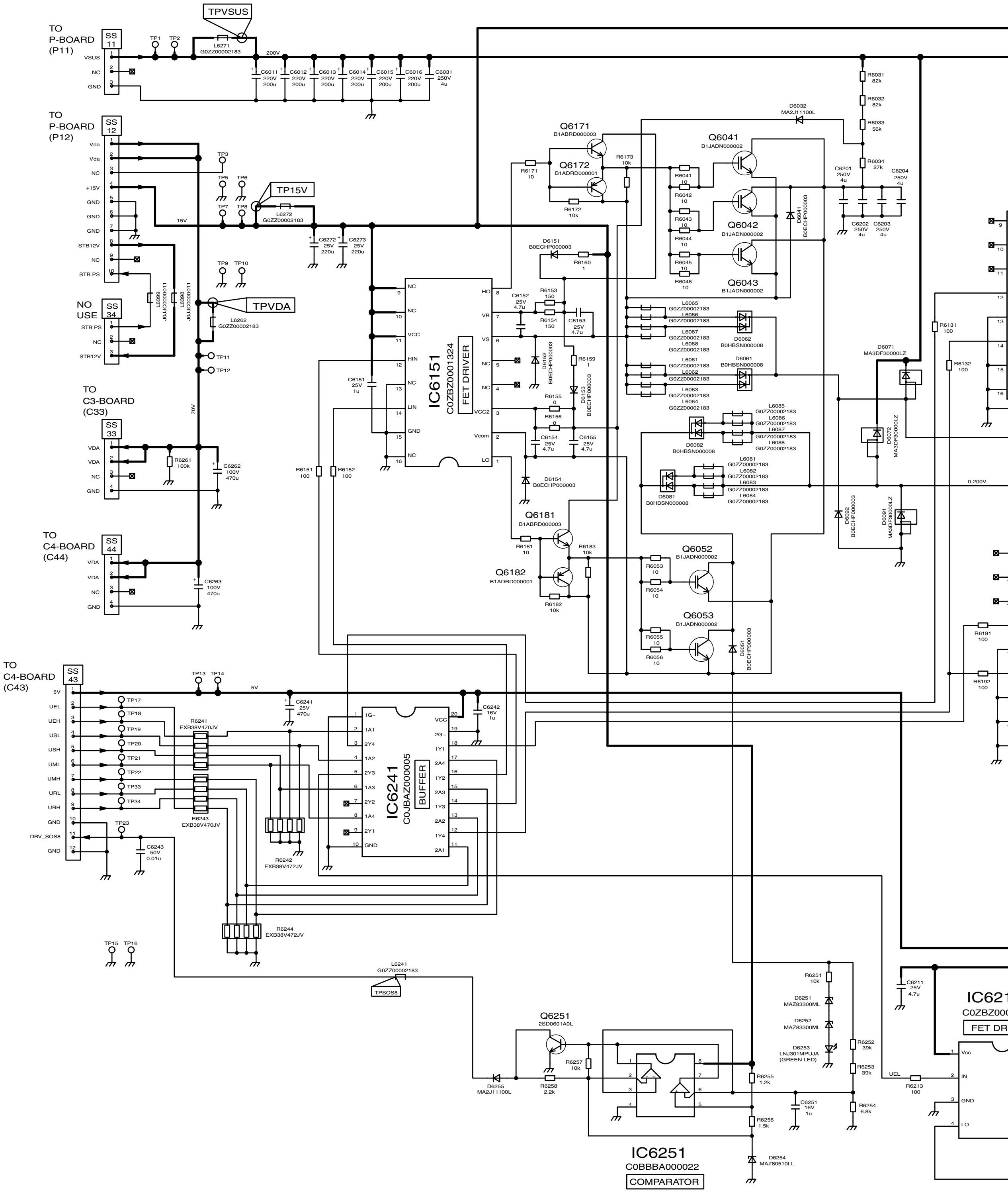
C6-BOARD TNPA3826 (2/2)
1
2
3
4
5
6
C7623
50V
100p
AB_LED3
AB_DDC16
AB_DDB16
AB_DDA16
AB_DDC17
AB_DDB17
AB_DDA17
AB_PCD2
AB_CLK2P2
R7630
0
SIDE
DM
NC
VDD2
VDD2
VDD2
NC
GND
GND
GND
GND
FS
VDD1
LEN
A6
A5
A4
A3
A2
A1
BLK
CLR
FX
FDET
VDD1
ODE
GND
GND
GND
GND
NC
VDD2
VDD2
VDD2
NC
VDD2
VDD2
VDD2
NC
GND
GND
GND
GND
FS
VDD1
LEN
A6
A5
A4
A3
A2
A1
BLK
CLR
C6_5V
CB3
C7622
100V
0.47u
C7621
16V
1u
C7624
16V
1u
TO
PANEL DATA
DRIVER
AB_CLRD
AB_ODED
R7626
6.8
R7625
6.8
R7624
6.8
R7623
6.8
VDA_75V
AB_CLRD

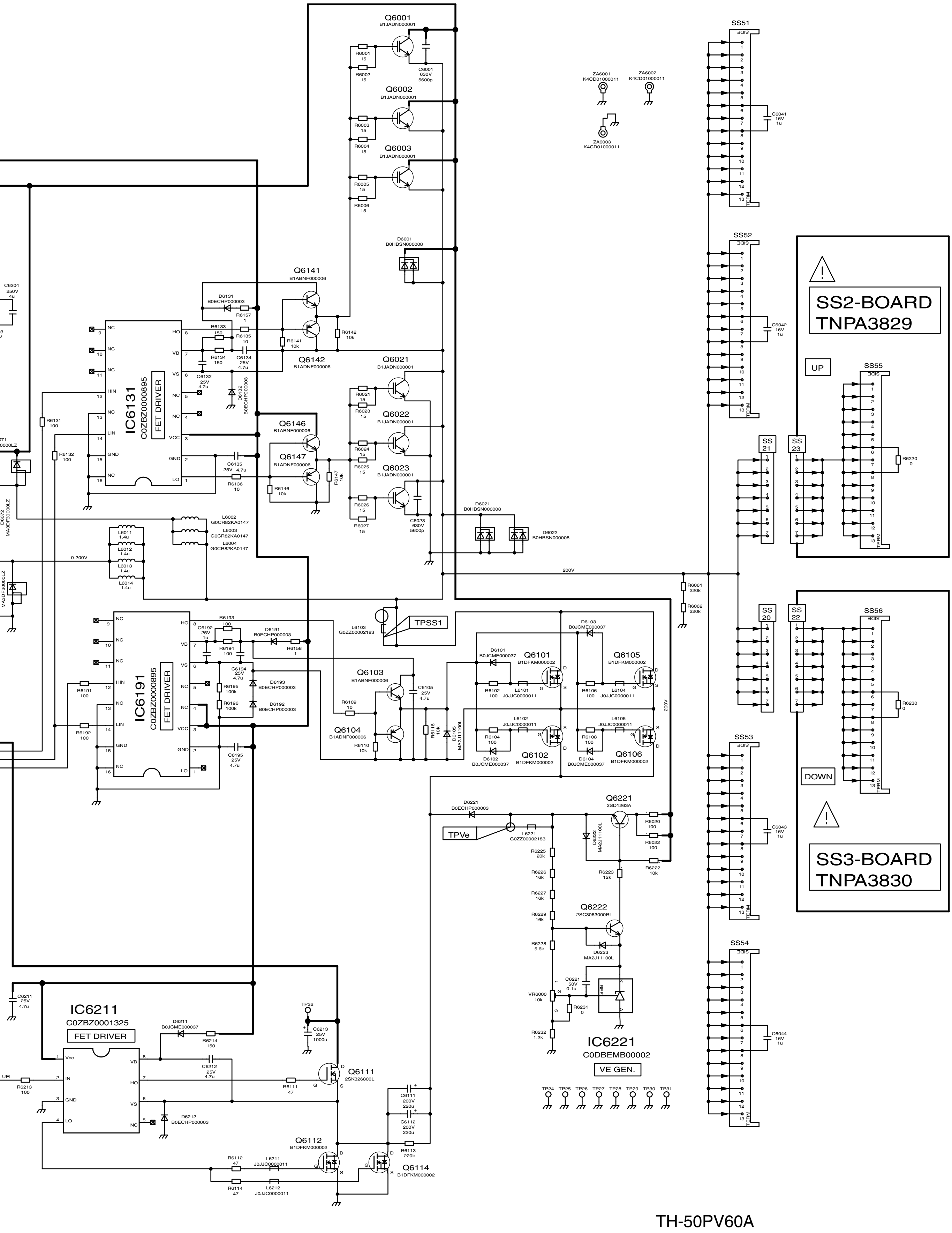

ZA7601
K4CD01000013
ZA7602
K4CD01000013
ZA7603
K4CD01000013
ZA7604
K4CD01000013
ZA7605
K4CD01000013
IC7601
C0JBAZ002692
BUFFER
AB_LED3
AB_LED2
AB_LED1
AB_CLK3N2
AB_CLK2P2
AB_CLK3N1
AB_CLK2P1
R7641 47
R7640 47
R7639 47
R7638 22
R7637 22
R7636 22
R7635 22
Y8
Y7
Y6
Y5
Y4
Y3
Y2
Y1
G2
Vcc
GND
A8
A7
A6
A5
A4
A3
A2
A1
G1
C7626
16V
0.1u
C6_5V
R7642
EXB38V681JV
AA_LED2
AA_CLK3N
AA_CLK2P
R7633
22k
R7632
100k
R7634
0
C7625
16V
1u
VDA_75V
AB_DDC20
AB_DDB20
AB_DDA20
AB_DDC21
AB_DDB21
AB_DDA21
AB_DDC18
AB_DDB18
AB_DDA18
AB_DDC19
AB_DDB19
AB_DDA19
AB_ODED
AB_CLRD
AB_PCD2
AA_LED2
AA_CLK3N
AA_CLK2P
AB_DDC16
AB_DDB16
AB_DDA16
AB_DDC17
AB_DDB17
AB_DDA17
TERM
SIDE
5V_DET
NC
GND
DOUTDC[20]
DOUTDB[20]
DOUTDA[20]
DOUTDC[21]
DOUTDB[21]
DOUTDA[21]
DOUTDC[18]
DOUTDB[18]
DOUTDA[18]
DOUTDC[19]
DOUTDB[19]
DOUTDA[19]
ODED
CLRD
PCD2
LED2
CLK[3](-)N2
CLK[2](+)P2
DOUTDC[16]
DOUTDB[16]
DOUTDA[16]
DOUTDC[17]
DOUTDB[17]
DOUTDA[17]
P5V
VDA75
TO
C5-BOARD
(C50)
C60
AB_DDB16
AB_DDA16
AB_DDC17
AB_DDB17
AB_DDA17
AB_PCD2
AB_CLK3N2
R7628
0
A6
A5
A4
A3
A2
A1
BLK
CLR
FX
FDET1
VDD1
ODE
GND
NC
VDD2
DM
C7619
100V
0.47u
AB_CLRD
AB_ODED

TH-50PV60A
C6-Board (2 of 2) Schematic Diagram

14.54. SS, SS2 and SS3-Board Schematic Diagram

SS-BOARD TNPA3828

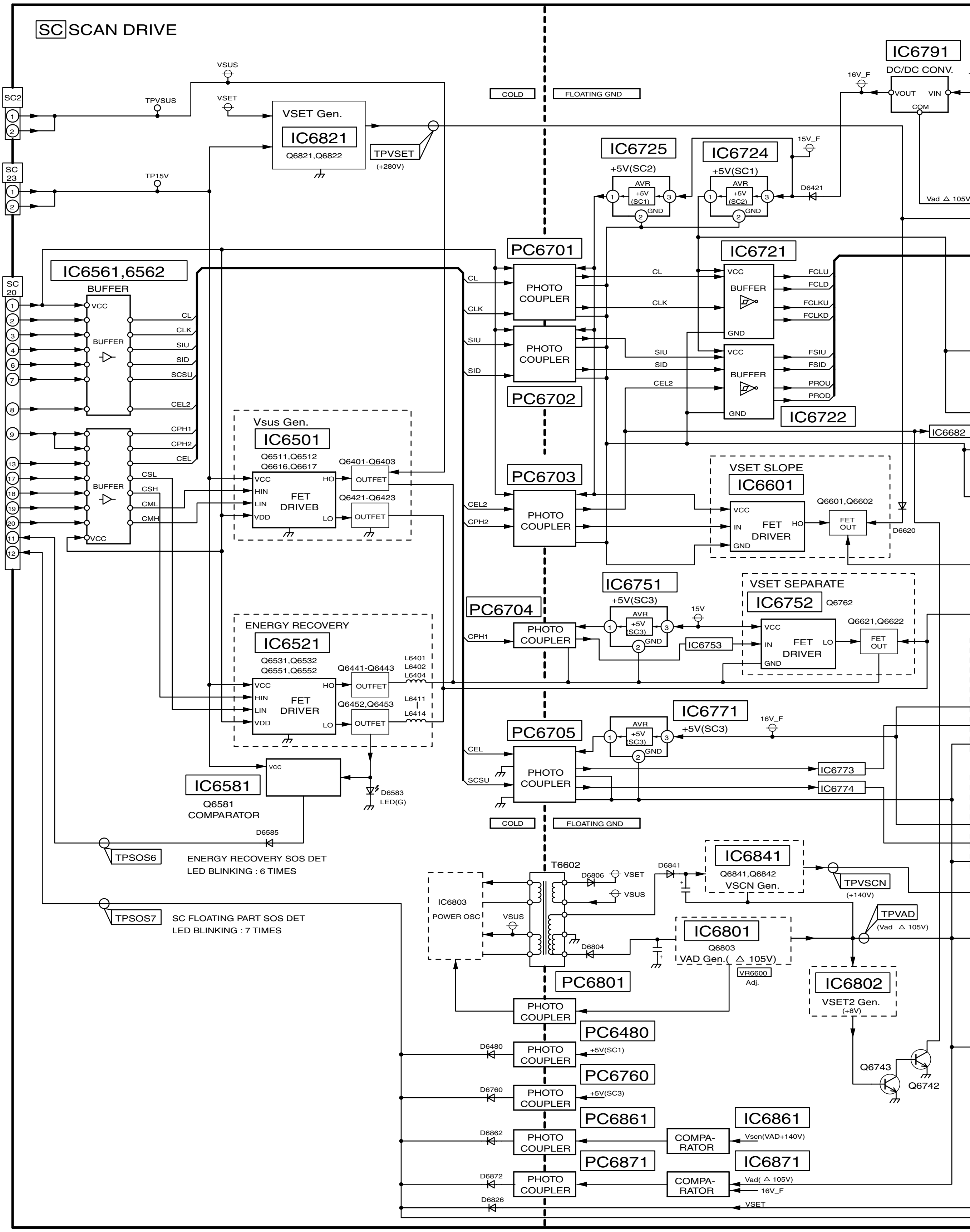

TPVSUS
TO P-BOARD (P11)
SS 11
VSUS
NC
GND
TP1
TP2
L6271 G0ZZ00002183
200V
C6011 220V 200u
C6012 220V 200u
C6013 220V 200u
C6014 220V 200u
C6015 220V 200u
C6016 220V 200u
C6031 250V 4u
TO P-BOARD (P12)
SS 12
Vda
NC
+15V
GND
STB12V
STB PS
TP3
TP5
TP6
TP7
TP8
TP15V
L6272 G0ZZ00002183
15V
C6272 25V 220u
C6273 25V 220u
TP9
TP10
NO USE
SS 34
TPVDA
L6262 G0ZZ00002183
TP11
TP12
TO C3-BOARD (C33)
SS 33
VDA
R6261 100k
C6262 100V 470u
70V
TO C4-BOARD (C44)
SS 44
C6263 100V 470u
TO C4-BOARD (C43)
SS 43
5V
UEL
UEH
USL
USH
UML
UMH
URL
URH
DRV_SOS8
TP13
TP14
TP17
TP18
TP19
TP20
TP21
TP22
TP33
TP34
TP23
C6243 50V 0.01u
C6241 25V 470u
R6241 EXB38V470JV
R6243 EXB38V470JV
R6242 EXB38V472JV
R6244 EXB38V472JV
TP15
TP16
IC6241
C0JBAZ000005
BUFFER
1G-
1A1
2Y4
1A2
2Y3
1A3
2Y2
1A4
2Y1
GND
VCC
2G-
1Y1
2A4
1Y2
2A3
1Y3
2A2
1Y4
2A1
C6242 16V 1u
L6241 G0ZZ00002183
TPSOS8
IC6151
C0ZBZ0001324
FET DRIVER
NC
VCC
HIN
LIN
GND
HO
VB
VS
VCC2
Vcom
LO
C6151 25V 1u
R6151 100
R6152 100
C6152 25V 4.7u
R6153 150
R6154 150
C6153 25V 4.7u
D6151 B0ECHP000003
R6160 1
D6152 B0ECHP000003
R6159 1
D6153 B0ECHP000003
R6155 0
R6156 0
C6154 25V 4.7u
C6155 25V 4.7u
D6154 B0ECHP000003
Q6171 B1ABRD000003
Q6172 B1ADRD000001
R6171 10
R6172 10k
R6173 10k
Q6041 B1JADN000002
Q6042 B1JADN000002
Q6043 B1JADN000002
R6041 10
R6042 10
R6043 10
R6044 10
R6045 10
R6046 10
D6041 B0ECHP000003
D6032 MA2J11100L
R6031 82k
R6032 82k
R6033 56k
R6034 27k
C6201 250V 4u
C6202 250V 4u
C6203 250V 4u
C6204 250V 4u
L6061 … L6068 G0ZZ00002183
D6061 B0HBSN000008
D6062 B0HBSN000008
L6081 … L6088 G0ZZ00002183
D6081 B0HBSN000008
D6082 B0HBSN000008
D6071 MA3DF30000LZ
D6072 MA3DF30000LZ
D6091 MA3DF30000LZ
D6092 B0ECHP000003
R6131 100
R6132 100
0-200V
Q6181 B1ABRD000003
Q6182 B1ADRD000001
R6181 10
R6182 10k
R6183 10k
Q6052 B1JADN000002
Q6053 B1JADN000002
R6053 10
R6054 10
R6055 10
R6056 10
D6051 B0ECHP000003
R6191 100
R6192 100
Q6251 2SD0601A0L
D6255 MA2J11100L
R6257 10k
R6258 2.2k
IC6251
C0BBBA000022
COMPARATOR
R6255 1.2k
R6256 1.5k
D6254 MAZ80510LL
C6251 16V 1u
R6251 10k
D6251 MAZ83300ML
D6252 MAZ83300ML
D6253 LNJ301MPUJA (GREEN LED)
R6252 39k
R6253 39k
R6254 6.8k
UEL
R6213 100
C6211 25V 4.7u
IC621
C0ZBZ00
FET DR
Vcc
IN
GND
LO


Q6001
B1JADN000001
Q6002
Q6003
D6001
B0HBSN000008
Q6141
B1ABNF000006
Q6142
B1ADNF000006
Q6021
Q6022
Q6023
Q6146
Q6147
D6021
D6022
IC6131
C0ZBZ0000895
FET DRIVER
IC6191
C0ZBZ0000895
FET DRIVER
L6002
G0CR82KA0147
L6003
L6004
L6011
L6012
L6013
L6014
0-200V
200V
TPSS1
L6103
G0ZZ00002183
Q6103
Q6104
Q6101
Q6102
Q6105
Q6106
B1DFKM000002
Q6221
2SD1263A
TPVe
L6221
Q6222
2SC3063000RL
IC6221
C0DBEMB00002
VE GEN.
IC6211
C0ZBZ0001325
FET DRIVER
Q6111
2SK3268OOL
Q6112
B1DFKM000002
Q6114
ZA6001
ZA6002
ZA6003
K4CD01000011
SS51
SS52
SS53
SS54
SS55
SS56
SS 21
SS 23
SS 20
SS 22
SS2-BOARD
TNPA3829
SS3-BOARD
TNPA3830
UP
DOWN
TERM
TP24
TP25
TP26
TP27
TP28
TP29
TP30
TP31
TP32

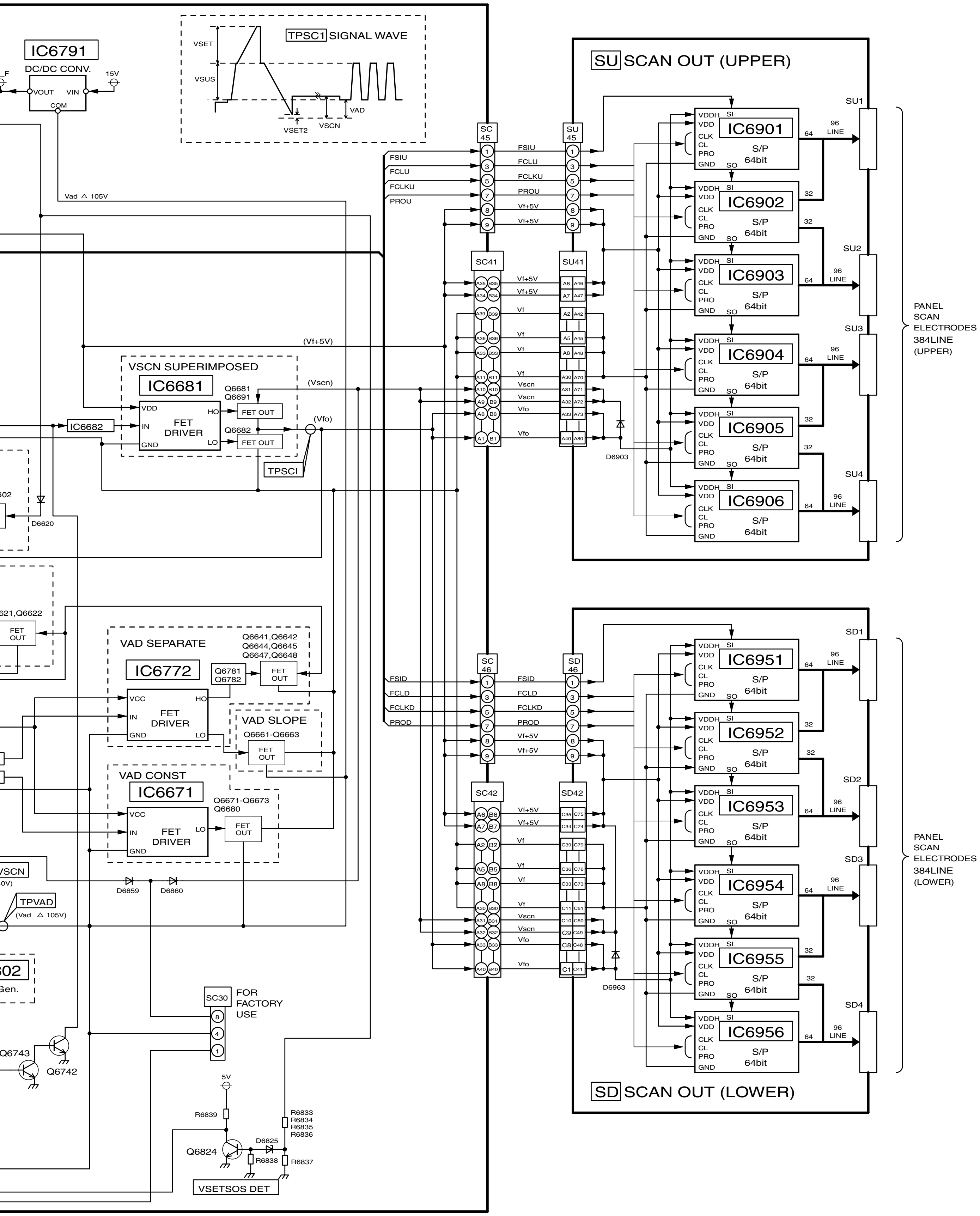
TH-50PV60A
SS, SS2 and SS3-Board Schematic Diagram

5 6 7 8 9

14.55. SC, SU and SD-Board Block Diagram


SC SCAN DRIVE
TO P2
SC2
Vsus
Vsus
TO P23
SC 23
+15V
+15V
TO D20
SC 20
P+5V
CL
CLK
SIU
SID
SCSU
CEL2
CPH
CEL
CSL
CSH
CML
CMH
SC_SOS6
SC_SOS7
VSUS
TPVSUS
VSET
TP15V
VSET Gen.
IC6821
Q6821,Q6822
TPVSET
(+280V)
COLD
FLOATING GND
IC6561,6562
BUFFER
VCC
BUFFER
CL
CLK
SIU
SID
SCSU
CEL2
CPH1
CPH2
CEL
CSL
CSH
CML
CMH
Vsus Gen.
IC6501
Q6511,Q6512
Q6616,Q6617
Q6401-Q6403
Q6421-Q6423
VCC
HIN
LIN
VDD
FET DRIVEB
HO
LO
OUTFET
OUTFET
ENERGY RECOVERY
IC6521
Q6531,Q6532
Q6551,Q6552
Q6441-Q6443
Q6452,Q6453
FET DRIVER
L6401
L6402
L6404
L6411
L6414
IC6581
Q6581
COMPARATOR
D6583
LED(G)
D6585
TPSOS6
ENERGY RECOVERY SOS DET
LED BLINKING : 6 TIMES
TPSOS7
SC FLOATING PART SOS DET
LED BLINKING : 7 TIMES
PC6701
PHOTO COUPLER
PC6702
PC6703
PC6704
PC6705
IC6725
+5V(SC2)
IC6724
+5V(SC1)
AVR
+5V (SC1)
+5V (SC2)
GND
15V_F
D6421
IC6791
DC/DC CONV.
16V_F
VOUT
VIN
COM
Vad △ 105V
IC6721
FCLU
FCLD
FCLKU
FCLKD
IC6722
FSIU
FSID
PROU
PROD
CEL2
IC6682
VSET SLOPE
IC6601
Q6601,Q6602
IN
FET DRIVER
FET OUT
D6620
CPH2
IC6751
+5V(SC3)
15V
VSET SEPARATE
IC6752
Q6762
Q6621,Q6622
IC6753
CPH1
IC6771
16V_F
IC6773
IC6774
T6602
D6806
D6841
D6804
IC6803
POWER OSC
IC6841
Q6841,Q6842
VSCN Gen.
TPVSCN
(+140V)
IC6801
Q6803
VAD Gen.(△ 105V)
VR6600
Adj.
TPVAD
(Vad △ 105V)
PC6801
IC6802
VSET2 Gen.
(+8V)
Q6743
Q6742
PC6480
D6480
+5V(SC1)
PC6760
D6760
+5V(SC3)
PC6861
D6862
IC6861
COMPA-RATOR
Vscn(VAD+140V)
PC6871
D6872
IC6871
Vad(△ 105V)
16V_F
D6826
VSET

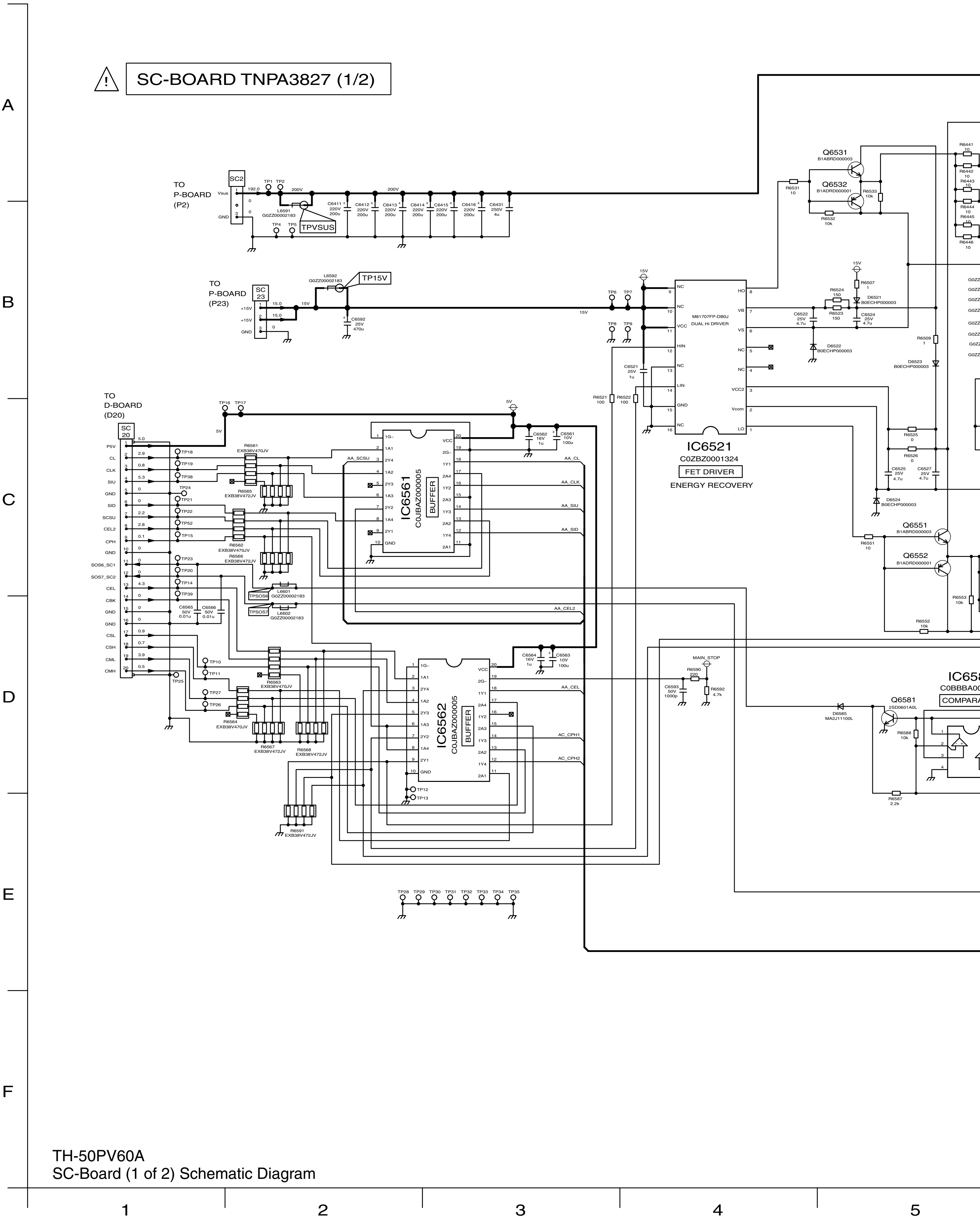
TH-50PV60A
SC, SU and SD-Board Block Diagram



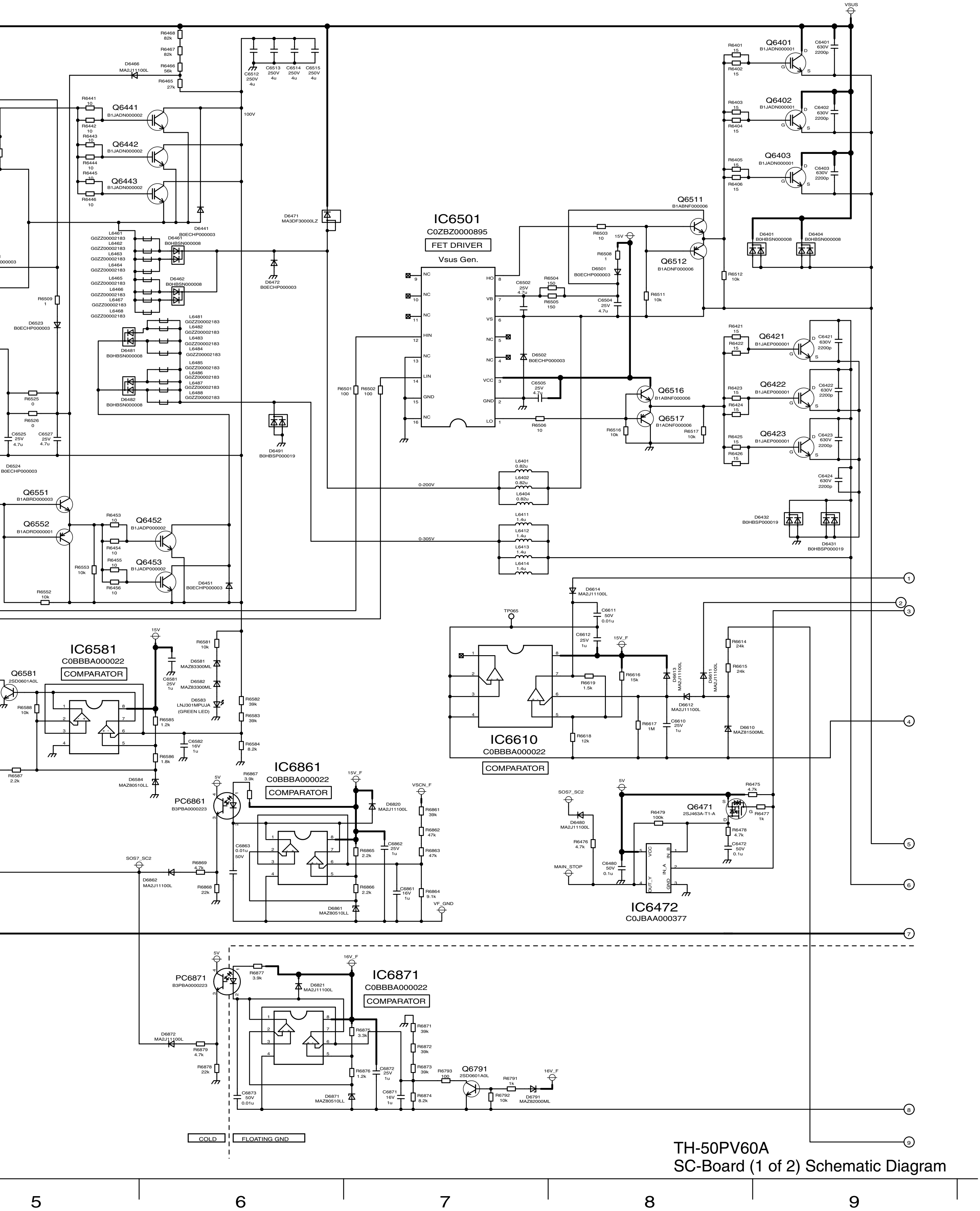
IC6791
DC/DC CONV.
VOUT
VIN
COM
15V
TPSC1 SIGNAL WAVE
VSET
VSUS
VAD
VSET2
VSCN
Vad △ 105V
SU SCAN OUT (UPPER)
SC 45
SU 45
FSIU
FCLU
FCLKU
PROU
Vf+5V
SC41
SU41
Vf
Vscn
Vfo
(Vf+5V)
VSCN SUPERIMPOSED
IC6681
Q6681
Q6691
(Vscn)
(Vfo)
FET OUT
FET DRIVER
VDD
IN
GND
HO
LO
Q6682
IC6682
TPSCI
D6620
D6903
IC6901
IC6902
IC6903
IC6904
IC6905
IC6906
VDDH
SI
VDD
CLK
CL
PRO
GND
SO
S/P
64bit
64
32
96 LINE
SU1
SU2
SU3
SU4
PANEL SCAN ELECTRODES 384LINE (UPPER)
Q6621,Q6622
VAD SEPARATE
Q6641,Q6642
Q6644,Q6645
Q6647,Q6648
IC6772
Q6781
Q6782
VCC
VAD SLOPE
Q6661-Q6663
VAD CONST
IC6671
Q6671-Q6673
Q6680
VSCN
TPVAD
(Vad △ 105V)
D6859
D6860
Gen.
SC30
FOR FACTORY USE
Q6743
Q6742
5V
R6839
Q6824
R6838
D6825
R6833
R6834
R6835
R6836
R6837
VSETSOS DET
SC 46
SD 46
FSID
FCLD
FCLKD
PROD
SC42
SD42
D6963
IC6951
IC6952
IC6953
IC6954
IC6955
IC6956
SD1
SD2
SD3
SD4
PANEL SCAN ELECTRODES 384LINE (LOWER)
SD SCAN OUT (LOWER)

TH-50PV60A
SC, SU and SD-Board Block Diagram

14.56. SC-Board (1 of 2) Schematic Diagram

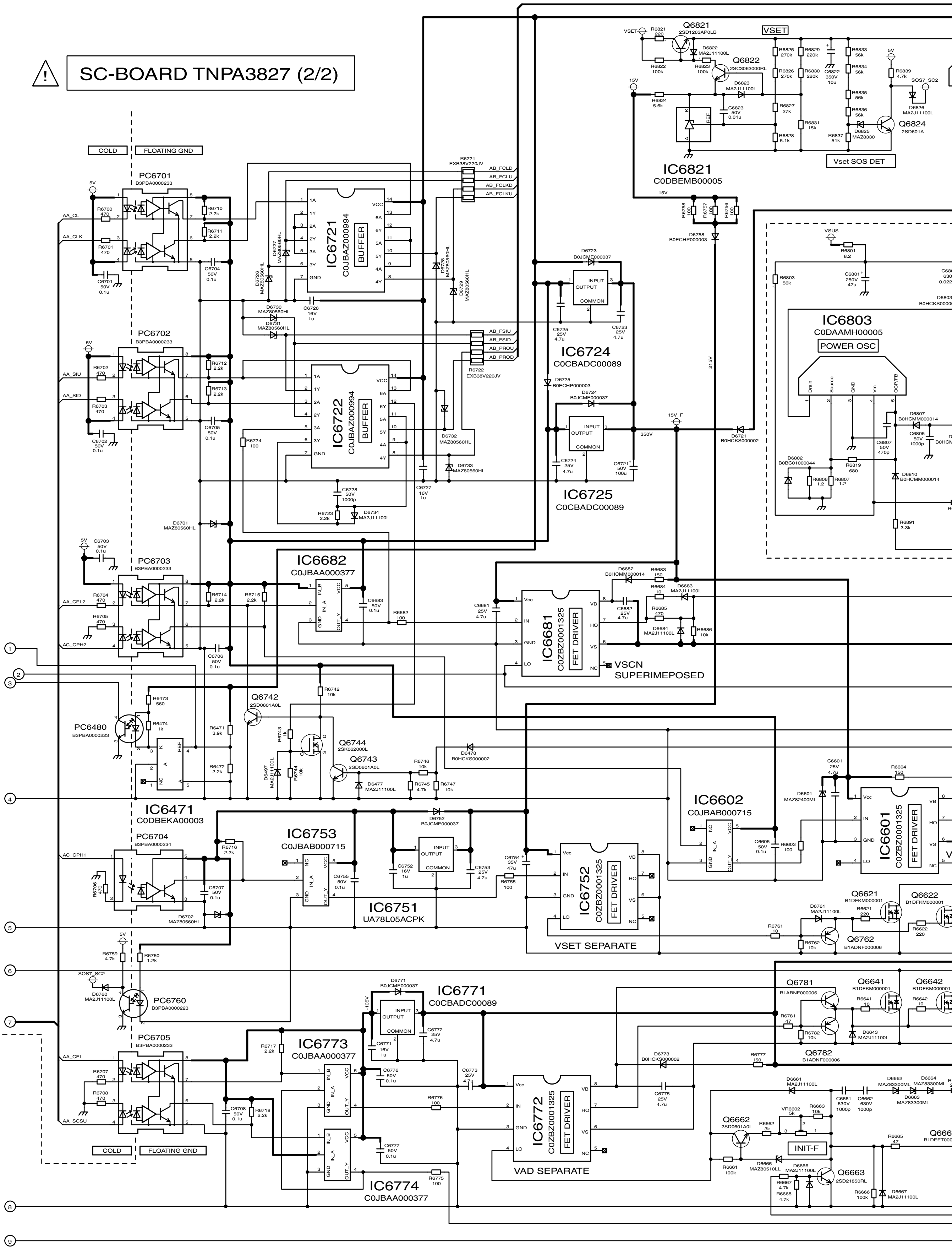

SC-BOARD TNPA3827 (1/2)
A
B
C
D
E
F
1
2
3
4
5
TO P-BOARD (P2)
SC2
Vsus
GND
192.0
200V
TP1
TP2
TP4
TP5
L6591 G0ZZ00002183
TPVSUS
C6411 220V 200u
C6412 220V 200u
C6413 220V 200u
C6414 220V 200u
C6415 220V 200u
C6416 220V 200u
C6431 250V 4u
TO P-BOARD (P23)
SC23
+15V
GND
15.0
15V
L6592 G0ZZ00002183
TP15V
C6592 25V 470u
TO D-BOARD (D20)
SC20
P5V
CL
CLK
SIU
SID
SCSU
CEL2
CPH
SOS6_SC1
SOS7_SC2
CEL
CBK
CSL
CSH
CML
CMH
TP16
TP17
5V
R6561 EXB38V470JV
R6565 EXB38V472JV
R6562 EXB38V470JV
R6566 EXB38V472JV
TPSOS6
L6601 G0ZZ00002183
TPSOS7
L6602 G0ZZ00002183
C6565 50V 0.01u
C6566 50V 0.01u
IC6561
C0JBAZ000005
BUFFER
C6562 16V 1u
C6561 10V 100u
AA_SCSU
AA_CL
AA_CLK
AA_SIU
AA_SID
AA_CEL2
R6563 EXB38V470JV
R6564 EXB38V470JV
R6567 EXB38V472JV
R6568 EXB38V472JV
IC6562
C0JBAZ000005
BUFFER
C6564 16V 1u
C6563 10V 100u
AA_CEL
AC_CPH1
AC_CPH2
TP12
TP13
R6591 EXB38V472JV
TP28 TP29 TP30 TP31 TP32 TP33 TP34 TP35
Q6531 B1ABRD000003
Q6532 B1ADRD000001
R6531 10
R6532 10k
R6533 10k
IC6521
C0ZBZ0001324
FET DRIVER
ENERGY RECOVERY
M81707FP-DB0J DUAL Hi DRIVER
TP6
TP7
TP8
TP9
C6521 25V 1u
R6521 100
R6522 100
R6524 150
R6523 150
R6507 1
D6521 B0ECHP000003
D6522 B0ECHP000003
C6522 25V 4.7u
C6524 25V 4.7u
R6509 1
D6523 B0ECHP000003
R6525 0
R6526 0
C6525 25V 4.7u
C6527 25V 4.7u
D6524 B0ECHP000003
Q6551 B1ABRD000003
Q6552 B1ADRD000001
R6551 10
R6553 10k
R6552 10k
MAIN_STOP
R6590 220
C6593 50V 1000p
R6592 4.7k
D6585 MA2J11100L
Q6581 2SD0601A0L
R6588 10k
R6587 2.2k
IC658
C0BBBA0
COMPARA
R6441 10
R6442 10
R6443 10
R6444 10
R6445 10
R6446 10

TH-50PV60A
SC-Board (1 of 2) Schematic Diagram


VSUS
Q6401
B1JADN000001
Q6402
B1JADN000001
Q6403
B1JADN000001
Q6441
B1JADN000002
Q6442
B1JADN000002
Q6443
B1JADN000002
D6466
MA2J11100L
D6471
MA3DF30000LZ
D6441
B0ECHP000003
D6461
B0HBSN000008
D6462
B0HBSN000008
D6472
B0ECHP000003
D6481
B0HBSN000008
D6482
B0HBSN000008
D6491
B0HBSP000019
C6512
250V
4u
C6513
250V
4u
C6514
250V
4u
C6515
250V
4u
100V
IC6501
C0ZBZ0000895
FET DRIVER
Vsus Gen.
NC
HIN
LIN
GND
HO
VB
VS
VCC
LO
Q6511
B1ABNF000006
Q6512
B1ADNF000006
Q6516
B1ABNF000006
Q6517
B1ADNF000006
D6401
B0HBSN000008
D6404
B0HBSN000008
D6501
B0ECHP000003
D6502
B0ECHP000003
15V
Q6421
B1JAEP000001
Q6422
B1JAEP000001
Q6423
B1JAEP000001
C6424
630V
2200p
D6432
B0HBSP000019
D6431
B0HBSP000019
0-200V
0-305V
L6401
0.82u
L6402
0.82u
L6404
0.82u
L6411
1.4u
L6412
1.4u
L6413
1.4u
L6414
1.4u
Q6551
B1ABRD000003
Q6552
B1ADRD000001
Q6452
B1JADP000002
Q6453
B1JADP000002
D6451
B0ECHP000003
D6523
B0ECHP000003
D6524
B0ECHP000003
IC6581
C0BBBA000022
COMPARATOR
Q6581
2SD0601A0L
D6581
MAZ83300ML
D6582
MAZ83300ML
D6583
LNJ301MPUJA
(GREEN LED)
D6584
MAZ80510LL
D6614
MA2J11100L
TP065
IC6610
C0BBBA000022
COMPARATOR
15V_F
D6613
MA2J11100L
D6611
MA2J11100L
D6612
MA2J11100L
D6610
MAZ81500ML
IC6861
C0BBBA000022
COMPARATOR
PC6861
B3PBA0000223
5V
15V_F
VSCN_F
D6820
MA2J11100L
D6861
MAZ80510LL
D6862
MA2J11100L
SOS7_SC2
VF_GND
Q6471
2SJ463A-T1-A
D6480
MA2J11100L
MAIN_STOP
IC6472
C0JBAA000377
VCC
IN_B
IN_A
OUT_Y
GND
PC6871
B3PBA0000223
16V_F
IC6871
C0BBBA000022
COMPARATOR
D6821
MA2J11100L
D6872
MA2J11100L
D6871
MAZ80510LL
Q6791
2SD0601A0L
D6791
MAZ82000ML
COLD
FLOATING GND
1
2
3
4
5
6
7
8
9
5
6
7
8
9

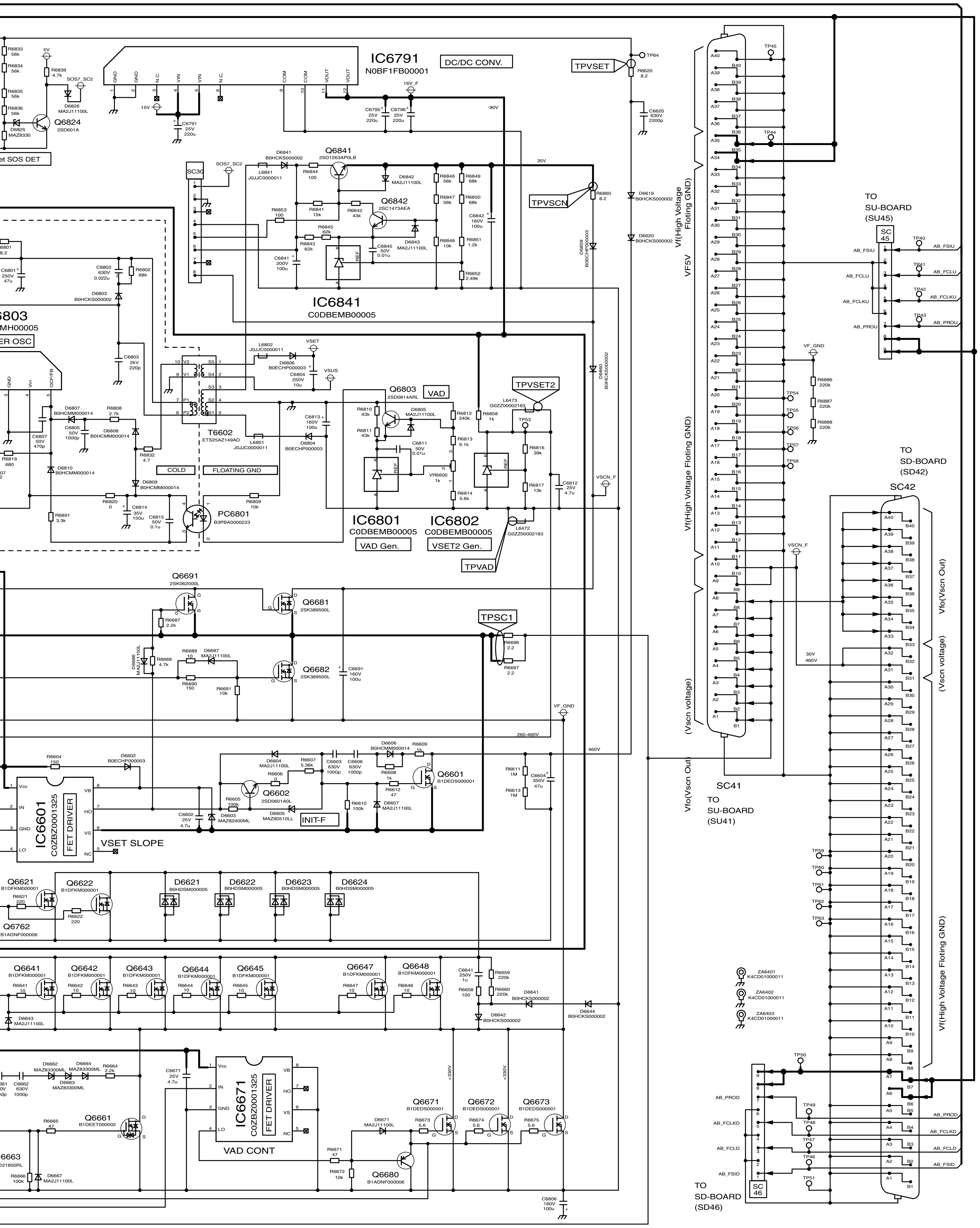
TH-50PV60A
SC-Board (1 of 2) Schematic Diagram

14.57. SC-Board (2 of 2) Schematic Diagram


SC-BOARD TNPA3827 (2/2)
COLD
FLOATING GND
PC6701
B3PBA0000233
PC6702
B3PBA0000233
PC6703
B3PBA0000233
PC6704
B3PBA0000234
PC6705
B3PBA0000233
PC6480
B3PBA0000223
PC6760
B3PBA0000223
AA_CL
AA_CLK
AA_SIU
AA_SID
AA_CEL2
AC_CPH2
AC_CPH1
AA_CEL
AA_SCSU
SOS7_SC2
IC6721
C0JBAZ000994
BUFFER
IC6722
C0JBAZ000994
BUFFER
R6721
EXB38V220JV
R6722
EXB38V220JV
AB_FCLD
AB_FCLU
AB_FCLKD
AB_FCLKU
AB_FSIU
AB_FSID
AB_PROU
AB_PROD
IC6724
C0CBADC00089
IC6725
C0CBADC00089
INPUT
OUTPUT
COMMON
IC6682
C0JBAA000377
IC6681
C0ZBZ0001325
FET DRIVER
VSCN
SUPERIMEPOSED
Q6742
2SD0601A0L
Q6744
2SK0620001
Q6743
2SD0601A0L
IC6471
C0DBEKA00003
IC6753
C0JBAB000715
IC6751
UA78L05ACPK
IC6752
C0ZBZ0001325
FET DRIVER
VSET SEPARATE
IC6771
C0CBADC00089
IC6773
C0JBAA000377
IC6774
C0JBAA000377
IC6772
C0ZBZ0001325
FET DRIVER
VAD SEPARATE
Q6821
2SD1263AP0LB
Q6822
2SC3063000RL
Q6824
2SD601A
VSET
Vset SOS DET
IC6821
C0DBEMB00005
15V
5V
215V
350V
15V_F
VSUS
IC6803
C0DAAMH00005
POWER OSC
Drain
Source
GND
Vin
OCP/FB
IC6602
C0JBAB000715
IC6601
C0ZBZ0001325
FET DRIVER
Q6621
B1DFKM000001
Q6622
B1DFKM000001
Q6762
B1ADNF000006
Q6781
B1ABNF000006
Q6641
B1DFKM000001
Q6642
B1DFKM000001
Q6782
B1ADNF000006
Q6662
2SD0601A0L
Q6663
2SD21850RL
INIT-F
Vcc
IN
GND
LO
VB
HO
VS
NC
1
2
3
4
5
6
7
8
9

TH-50PV60A SC-Board (2 of 2) Schematic Diagram

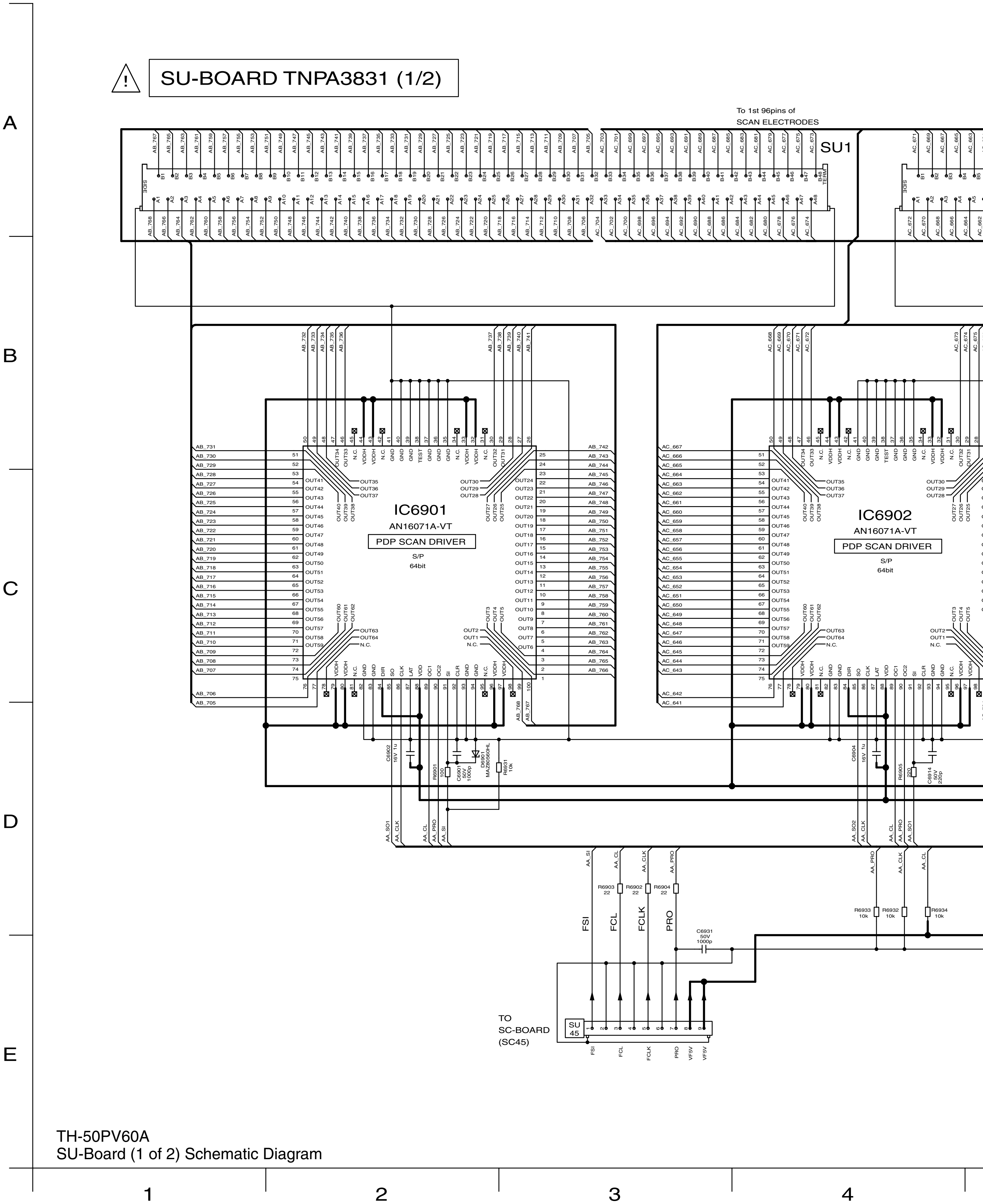
10 11 12 13 14


IC6791
N0BF1FB00001
DC/DC CONV.
GND
GND
N.C.
VIN
VIN
N.C.
COM
COM
VOUT
VOUT
15V
16V_F
-90V
C6791 25V 220u
C6795 25V 220u
C6796 25V 220u
TPVSET
TP64
R6620 8.2
C6620 630V 2200p
R6833 56k
R6834 56k
R6835 56k
R6836 56k
D6825 MAZ8330
R6839 4.7k
5V
SOS7_SC2
D6826 MA2J11100L
Q6824 2SD601A
et SOS DET
SC30
D6841 B0HCKS000002
L6841 J0JJC0000011
Q6841 2SD1263AP0LB
R6844 100
D6842 MA2J11100L
Q6842 2SC1473AEA
R6841 15k
R6842 43k
R6853 100
R6845 62k
R6843 62k
D6843 MA2J11100L
C6845 50V 0.01u
C6841 200V 100u
R6846 56k
R6847 56k
R6848 10k
R6849 68k
R6850 68k
R6851 1.2k
R6852 2.49k
C6842 160V 100u
35V
IC6841
C0DBEMB00005
TPVSCN
R6860 8.2
D6619 B0HCKS000002
D6620 B0HCKS000002
D6659 B0ECHP000003
D6660 B0HCKS000002
R6801 8.2
C6801 250V 47u
C6802 630V 0.022u
R6802 68k
D6803 B0HCKS000002
6803
MH00005
ER OSC
C6803 2kV 220p
L6802 J0JJC0000011
VSET
D6806 B0ECHP000003
C6804 250V 10u
VSUS
T6602 ETS25AZ149AD
V2 V1 S5 S4 S3 S2 S1 P1 P2
D6807 B0HCMM000014
R6808 2.7k
C6805 50V 1000p
D6808 B0HCMM000014
C6807 50V 470p
R6819 680
D6810 B0HCMM000014
R6832 4.7
COLD
FLOATING GND
D6809 B0HCMM000014
R6820 0
C6814 35V 150u
C6815 50V 0.1u
R6891 3.3k
R6809 10k
PC6801 B3PBA0000223
L6801 J0JJC0000011
D6804 B0ECHP000003
C6813 160V 100u
Q6803 2SD0814ARL
VAD
R6810 43k
R6811 43k
D6805 MA2J11100L
C6811 50V 0.01u
R6812 240k
R6813 9.1k
VR6600 1k
R6814 5.6k
R6858 1k
L6473 G0ZZ00002183
TPVSET2
TP53
R6816 39k
R6817 13k
C6812 25V 4.7u
VSCN_F
IC6801
C0DBEMB00005
VAD Gen.
IC6802
C0DBEMB00005
VSET2 Gen.
L6472 G0ZZ00002183
TPVAD
Q6691 2SK062000L
Q6681 2SK389500L
R6687 2.2k
D6686 MA2J11100L
R6688 4.7k
R6689 10
D6687 MA2J11100L
R6690 150
R6691 10k
Q6682 2SK389500L
C6691 160V 100u
TPSC1
R6696 2.2
R6697 2.2
VF_GND
260-460V
460V
R6604 150
D6602 B0ECHP000003
IC6601
C0ZBZ0001325
FET DRIVER
Vcc IN GND LO VB HO VS NC
VSET SLOPE
D6604 MA2J11100L
R6607 5.36k
C6603 630V 1000p
C6606 630V 1000p
D6606 B0HCMM000014
R6609 1k
R6606 0
R6608 1k
Q6601 B1DEDS000001
Q6602 2SD0601A0L
R6605 100k
C6602 25V 4.7u
D6603 MAZ82400ML
D6605 MAZ80510LL
INIT-F
R6612 47
R6610 100k
D6607 MA2J11100L
R6611 1M
R6613 1M
C6604 350V 47u
Q6621 B1DFKM000001
Q6622 B1DFKM000001
R6621 220
R6622 220
Q6762 B1ADNF000006
D6621 B0HDSM000005
D6622 B0HDSM000005
D6623 B0HDSM000005
D6624 B0HDSM000005
Q6641 B1DFKM000001
Q6642 B1DFKM000001
Q6643 B1DFKM000001
Q6644 B1DFKM000001
Q6645 B1DFKM000001
Q6647 B1DFKM000001
Q6648 B1DFKM000001
R6641 10
R6642 10
R6643 10
R6644 10
R6645 10
R6647 10
R6648 10
D6643 MA2J11100L
C6641 250V 1u
R6659 220k
R6658 100
R6660 220k
D6641 B0HCKS000002
D6642 B0HCKS000002
D6644 B0HCKS000002
D6662 MAZ83300ML
D6664 MAZ83300ML
D6663 MAZ83300ML
R6664 2.2k
C6662 630V 1000p
C6671 25V 4.7u
IC6671
C0ZBZ0001325
FET DRIVER
VAD CONT
R6665 47
Q6661 B1DEET000002
6663
R6666 100k
D6667 MA2J11100L
+330V
+330V
D6671 MA2J11100L
Q6671 B1DEDS000001
Q6672 B1DEDS000001
Q6673 B1DEDS000001
R6673 5.6
R6674 5.6
R6675 5.6
R6671 47
R6672 10k
Q6680 B1ADNF000006
C6806 160V 100u
TP45
TP44
Vf(High Voltage Floting GND)
VF5V
Vf(High Voltage Floting GND)
(Vscn voltage)
Vfo(Vscn Out)
SC41
TO SU-BOARD (SU41)
TO SU-BOARD (SU45)
SC 45
AB_FSIU
AB_FCLU
AB_FCLKU
AB_PROU
TP40
TP41
TP42
TP43
VF_GND
R6886 220k
R6887 220k
R6888 220k
TP54
TP55
TP56
TP57
TP58
TO SD-BOARD (SD42)
SC42
VSCN_F
30V 460V
Vfo(Vscn Out)
(Vscn voltage)
Vf(High Voltage Floting GND)
TP59
TP60
TP61
TP62
TP63
ZA6401 K4CD01000011
ZA6402 K4CD01000011
ZA6403 K4CD01000011
TP50
TP49
TP48
TP47
TP46
TP51
AB_PROD
AB_FCLKD
AB_FCLD
AB_FSID
SC 46
TO SD-BOARD (SD46)

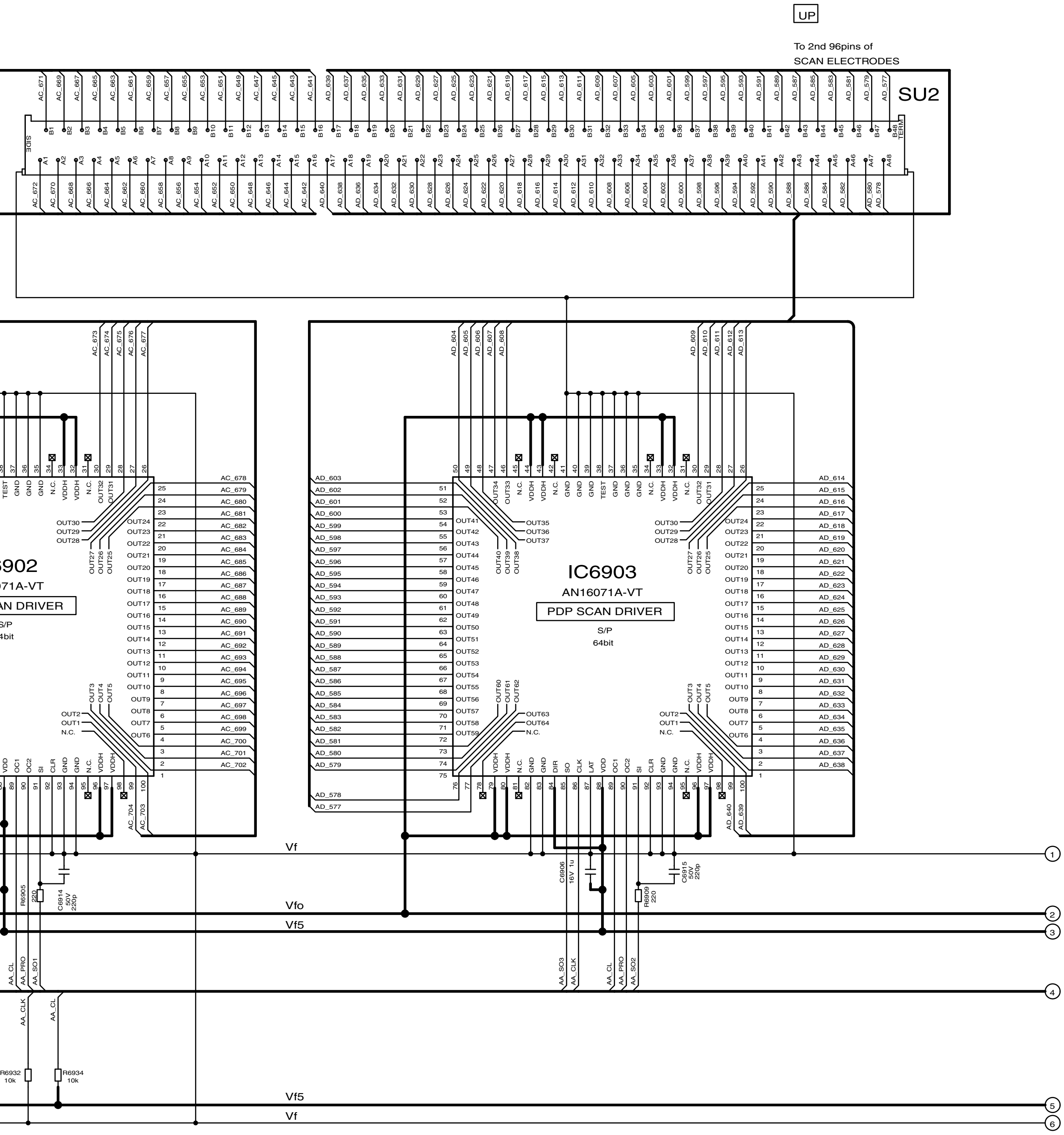
TH-50PV60A SC-Board (2 of 2) Schematic Diagram

14 15 16 17 18

14.58. SU-Board (1 of 2) Schematic Diagram


SU-BOARD TNPA3831 (1/2)
To 1st 96pins of SCAN ELECTRODES
SU1
IC6901
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
IC6902
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
C6902 16V 1u
R6901 100
C6901 50V 1000p
D6901 MAZ8056OHL
R6931 10k
C6904 16V 1u
R6905 220
C6914 50V 220p
AA_SO1
AA_CLK
AA_CL
AA_PRO
AA_SI
AA_SO2
R6903 22
R6902 22
R6904 22
R6933 10k
R6932 10k
R6934 10k
C6931 50V 1000p
FSI
FCL
FCLK
PRO
VF5V
TO SC-BOARD (SC45)
SU 45
A
B
C
D
E
1
2
3
4

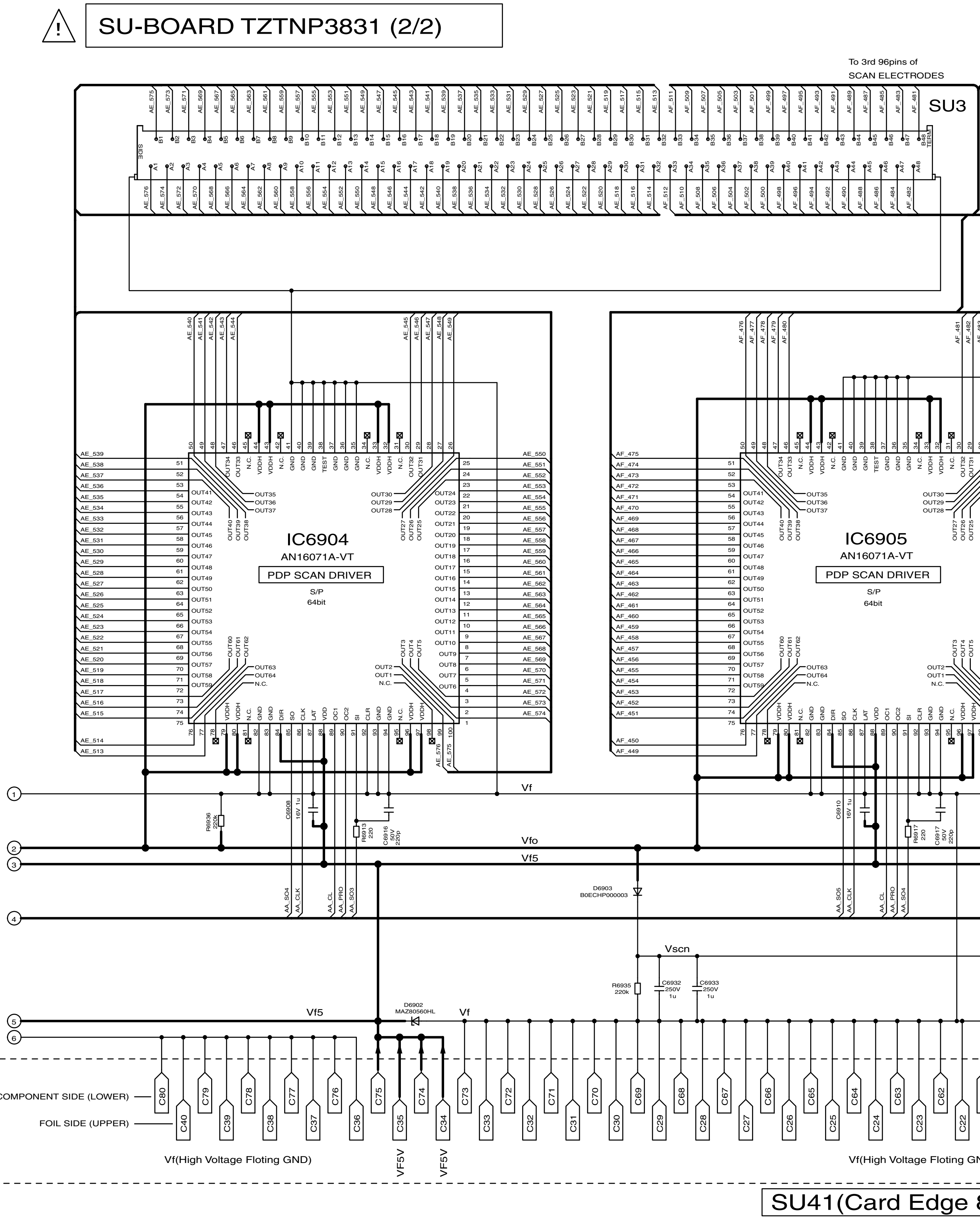
TH-50PV60A
SU-Board (1 of 2) Schematic Diagram

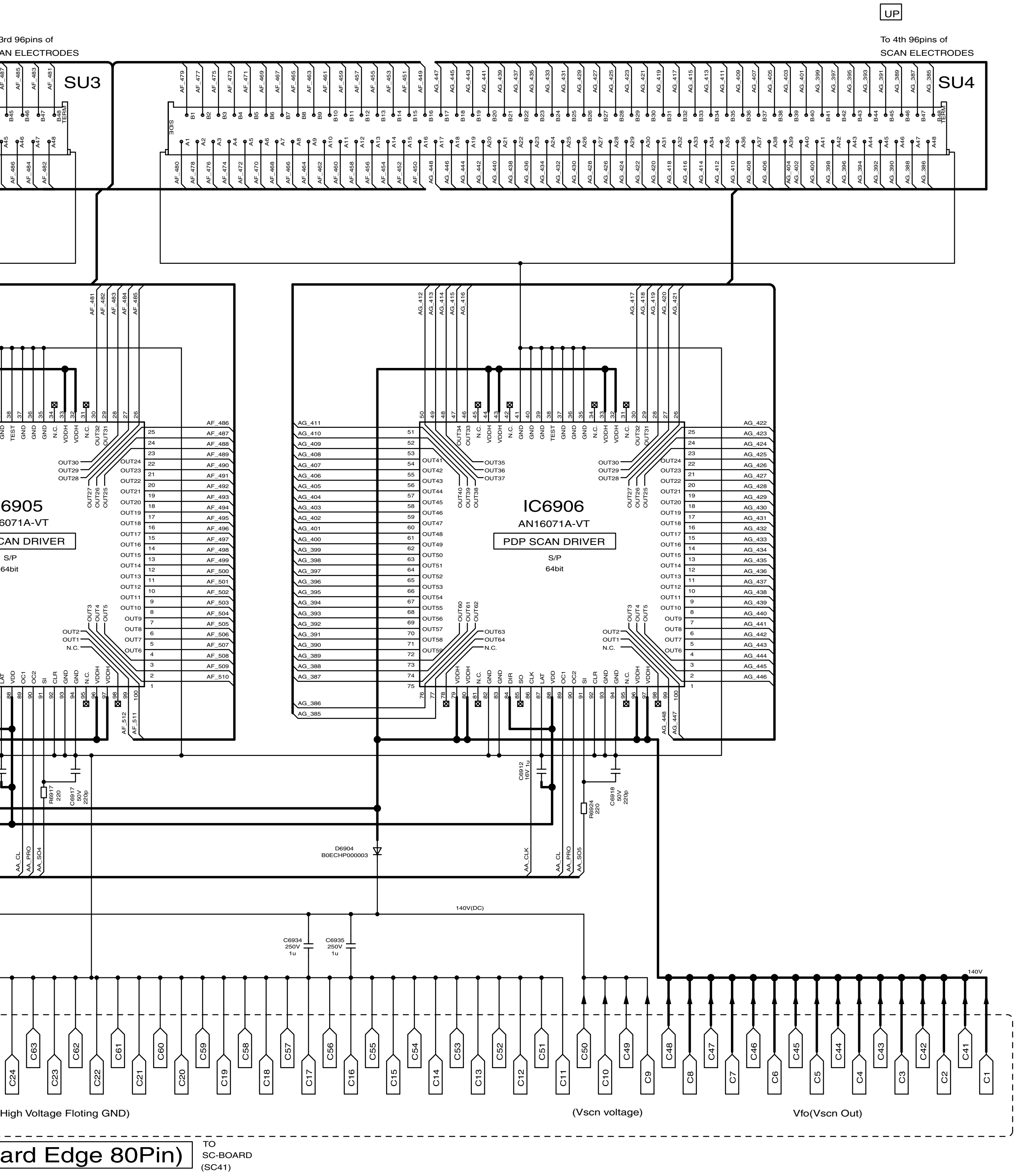

UP
To 2nd 96pins of
SCAN ELECTRODES
SU2
SIDE
TERM
IC6903
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
6902
071A-VT
AN DRIVER
Vf
Vfo
Vf5
Vf5
Vf
C6906
16V 1u
R6909
220
C6915
50V
220p
R6905
220
C6914
50V
220p
R6932
10k
R6934
10k
AA_SO3
AA_CLK
AA_CL
AA_PRO
AA_SO2
AA_SO1
1
2
3
4
5
6

TH-50PV60A
SU-Board (1 of 2) Schematic Diagram

5	6	7	8

14.59. SU-Board (2 of 2) Schematic Diagram

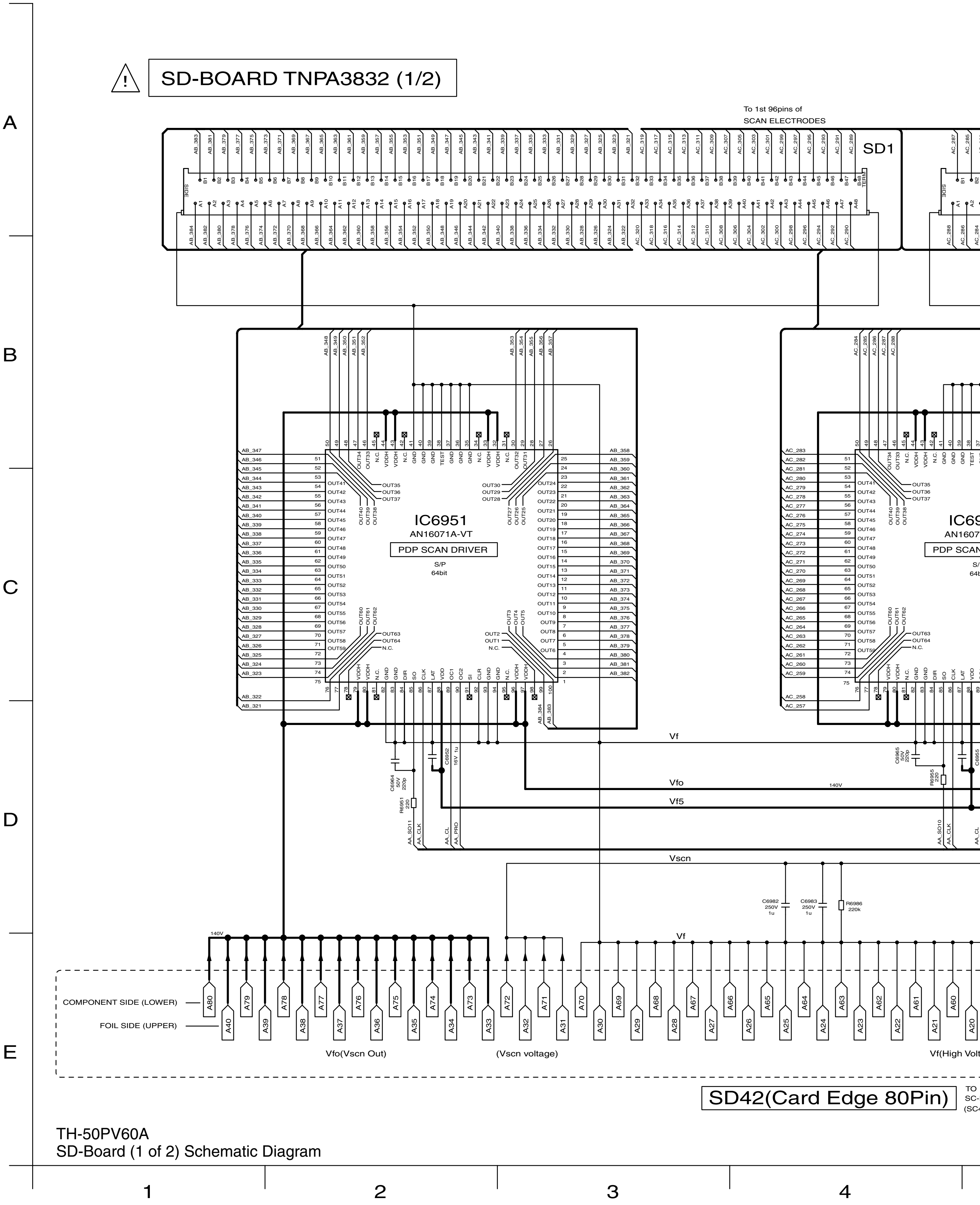

SU-BOARD TZTNP3831 (2/2)
To 3rd 96pins of SCAN ELECTRODES
SU3
IC6904
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
IC6905
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
Vf
Vfo
Vf5
Vscn
D6903
B0ECHP000003
D6902
MAZ80560HL
R6936 220k
C6908 16V 1u
R6913 220
C6916 50V 220p
C6910 16V 1u
R6917 220
C6917 50V 220p
R6935 220k
C6932 250V 1u
C6933 250V 1u
AA_SO4
AA_CLK
AA_CL
AA_PRO
AA_SO3
AA_SO5
COMPONENT SIDE (LOWER)
FOIL SIDE (UPPER)
Vf(High Voltage Floting GND)
VF5V
VF5V
Vf(High Voltage Floting GN
SU41(Card Edge 8


UP
3rd 96pins of
AN ELECTRODES
To 4th 96pins of
SCAN ELECTRODES
SU3
SU4
6905
6071A-VT
CAN DRIVER
S/P
64bit
IC6906
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
R6917
220
C6917
50V
220p
C6912
16V 1u
R6924
220
C6918
50V
220p
D6904
B0ECHP000003
AA_CL
AA_PRO
AA_SO4
AA_CLK
AA_CL
AA_PRO
AA_SO5
140V(DC)
C6934
250V
1u
C6935
250V
1u
140V
High Voltage Floting GND)
(Vscn voltage)
Vfo(Vscn Out)
ard Edge 80Pin)
TO
SC-BOARD
(SC41)

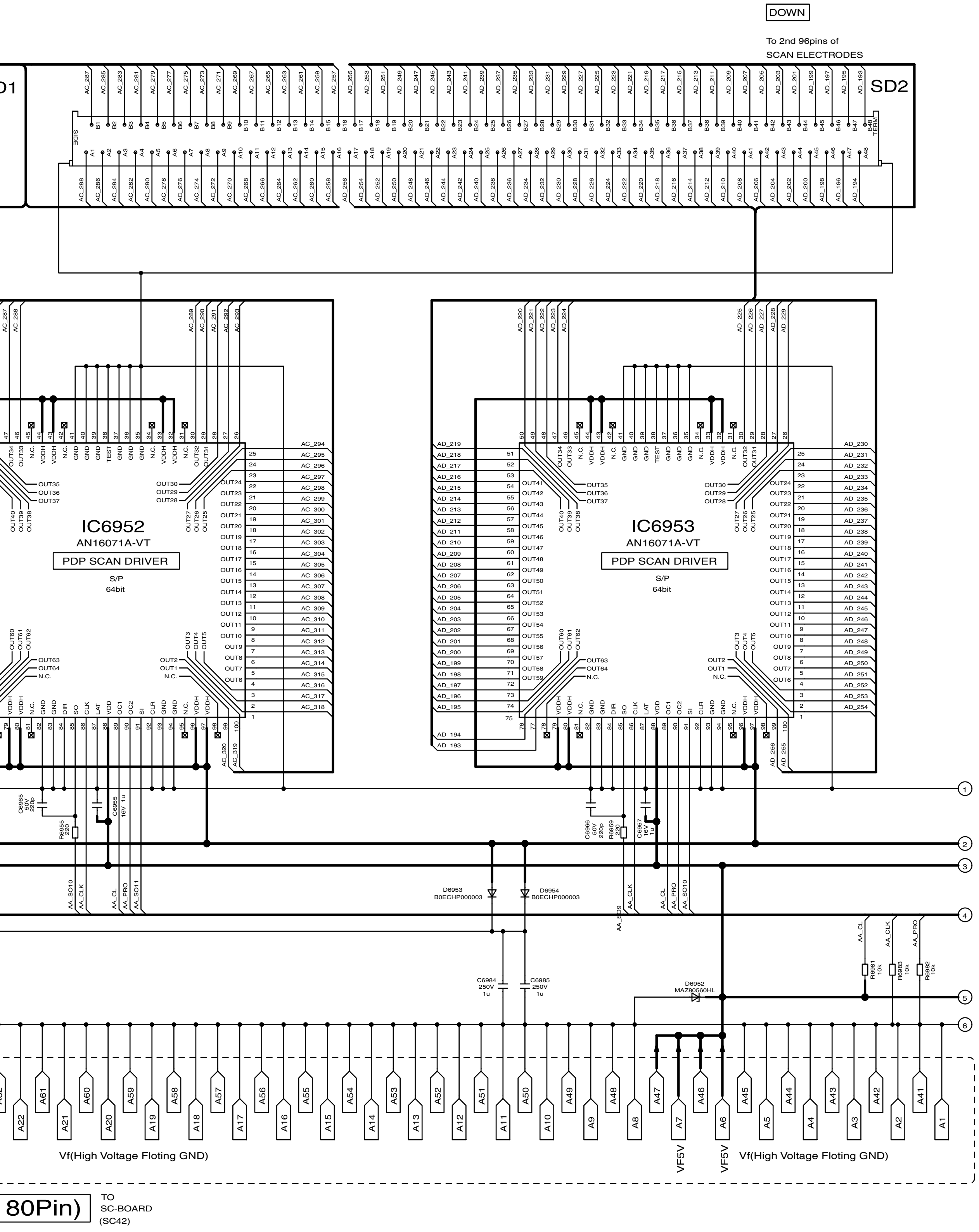
TH-50PV60A
SU-Board (2 of 2) Schematic Diagram

12 13 14 15

14.60. SD-Board (1 of 2) Schematic Diagram


SD-BOARD TNPA3832 (1/2)
To 1st 96pins of
SCAN ELECTRODES
SD1
IC6951
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
Vf
Vfo
Vf5
Vscn
140V
C6964
50V
220p
C6952
16V 1u
R6951
220
C6965
50V
220p
R6955
220
C6982
250V
1u
C6983
250V
1u
R6986
220k
AA_SO11
AA_CLK
AA_CL
AA_PRO
AA_SO10
COMPONENT SIDE (LOWER)
FOIL SIDE (UPPER)
Vfo(Vscn Out)
(Vscn voltage)
SD42(Card Edge 80Pin)
A
B
C
D
E
1
2
3
4

TH-50PV60A
SD-Board (1 of 2) Schematic Diagram

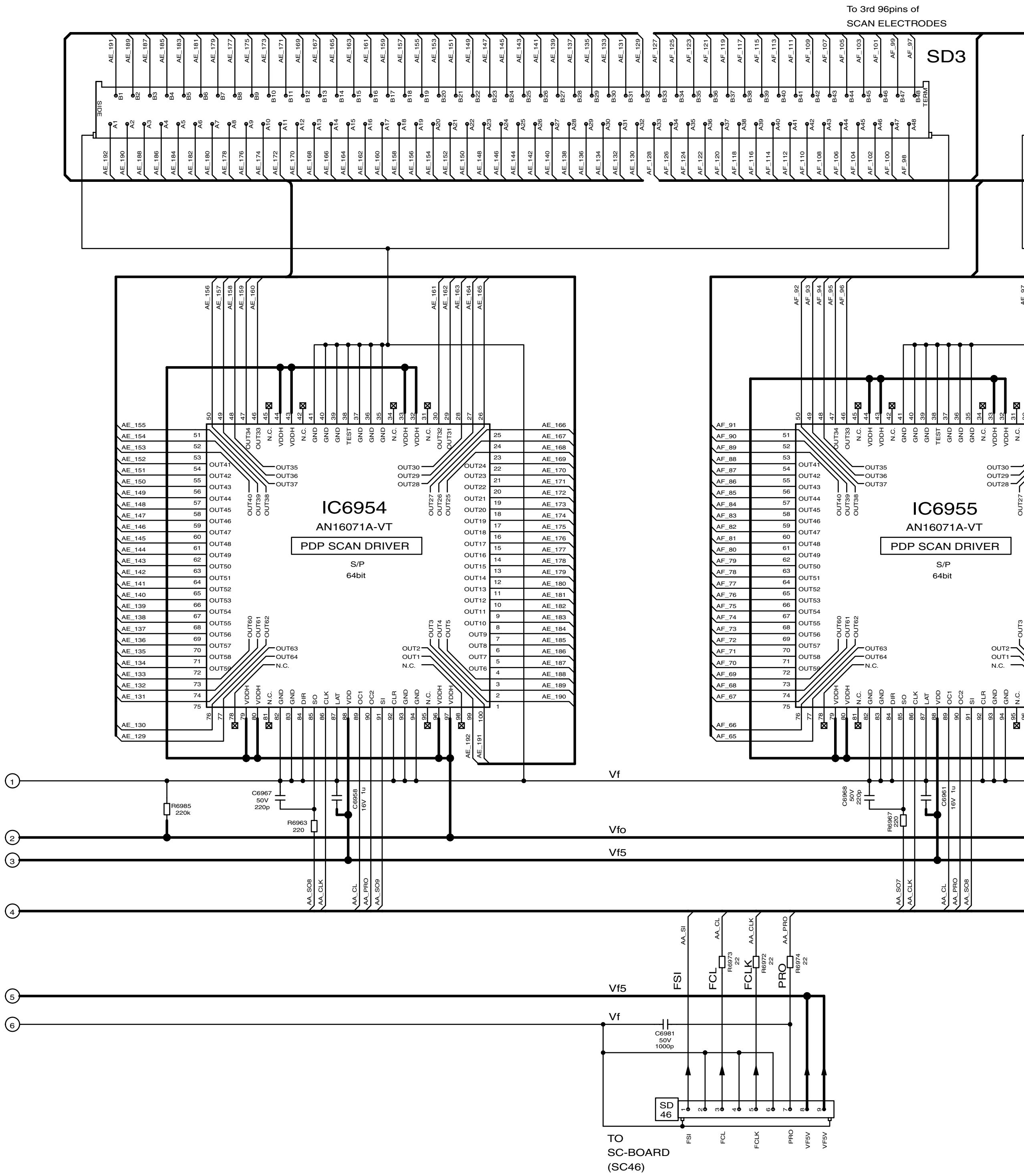

DOWN
To 2nd 96pins of
SCAN ELECTRODES
D1
SD2
SIDE
TERM
IC6952
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
IC6953
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
C6965 50V 220p
C6955 16V 1u
R6955 220
C6966 50V 220p
R6959 220
C6957 16V 1u
D6953 B0ECHP000003
D6954 B0ECHP000003
C6984 250V 1u
C6985 250V 1u
D6952 MAZ80560HL
R6981 10k
R6983 10k
R6982 10k
AA_SO10
AA_CLK
AA_CL
AA_PRO
AA_SO11
AA_SO9
1
2
3
4
5
6
Vf(High Voltage Floting GND)
VF5V
VF5V
Vf(High Voltage Floting GND)
80Pin)
TO
SC-BOARD
(SC42)

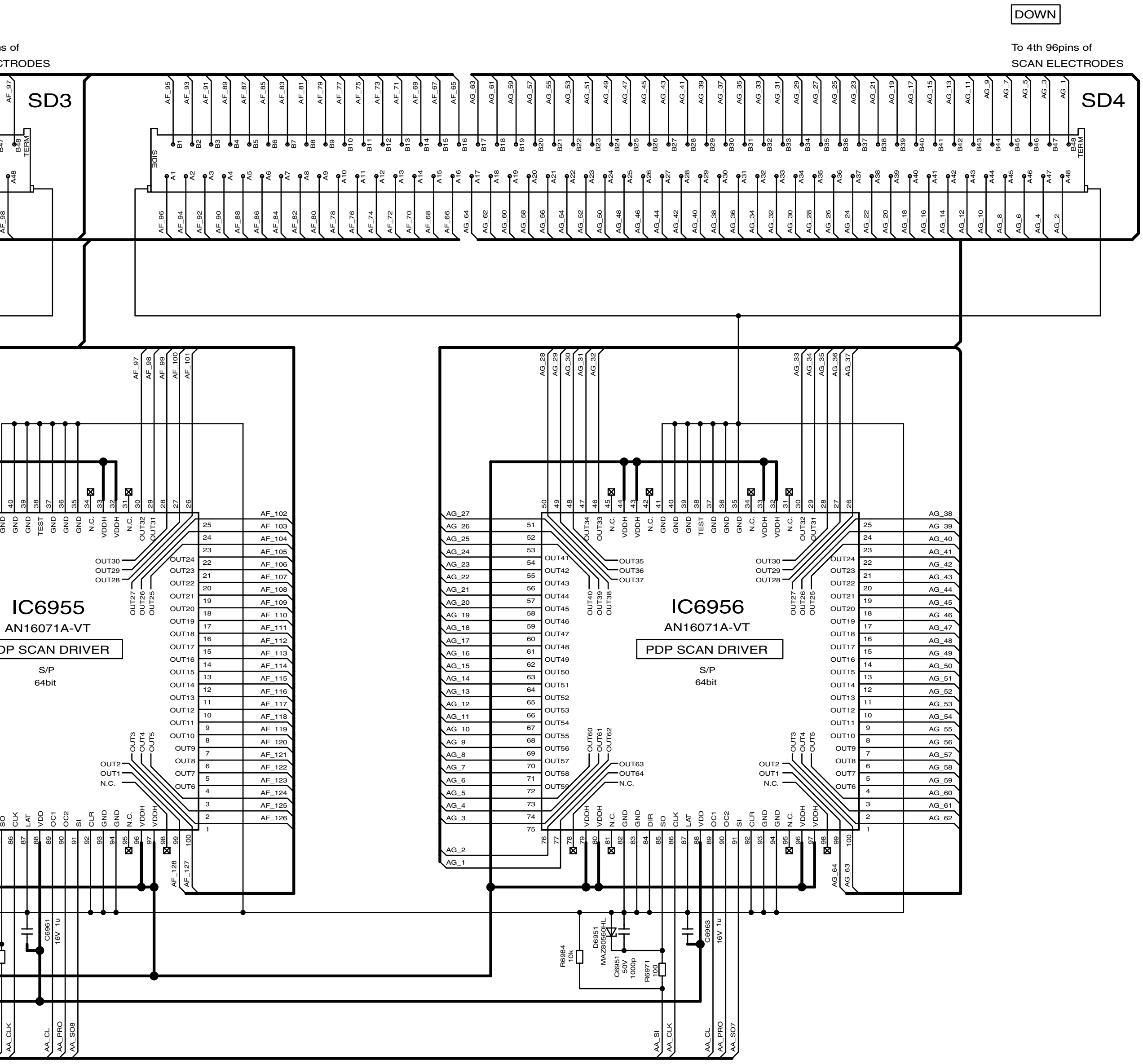
TH-50PV60A
SD-Board (1 of 2) Schematic Diagram

5 6 7 8

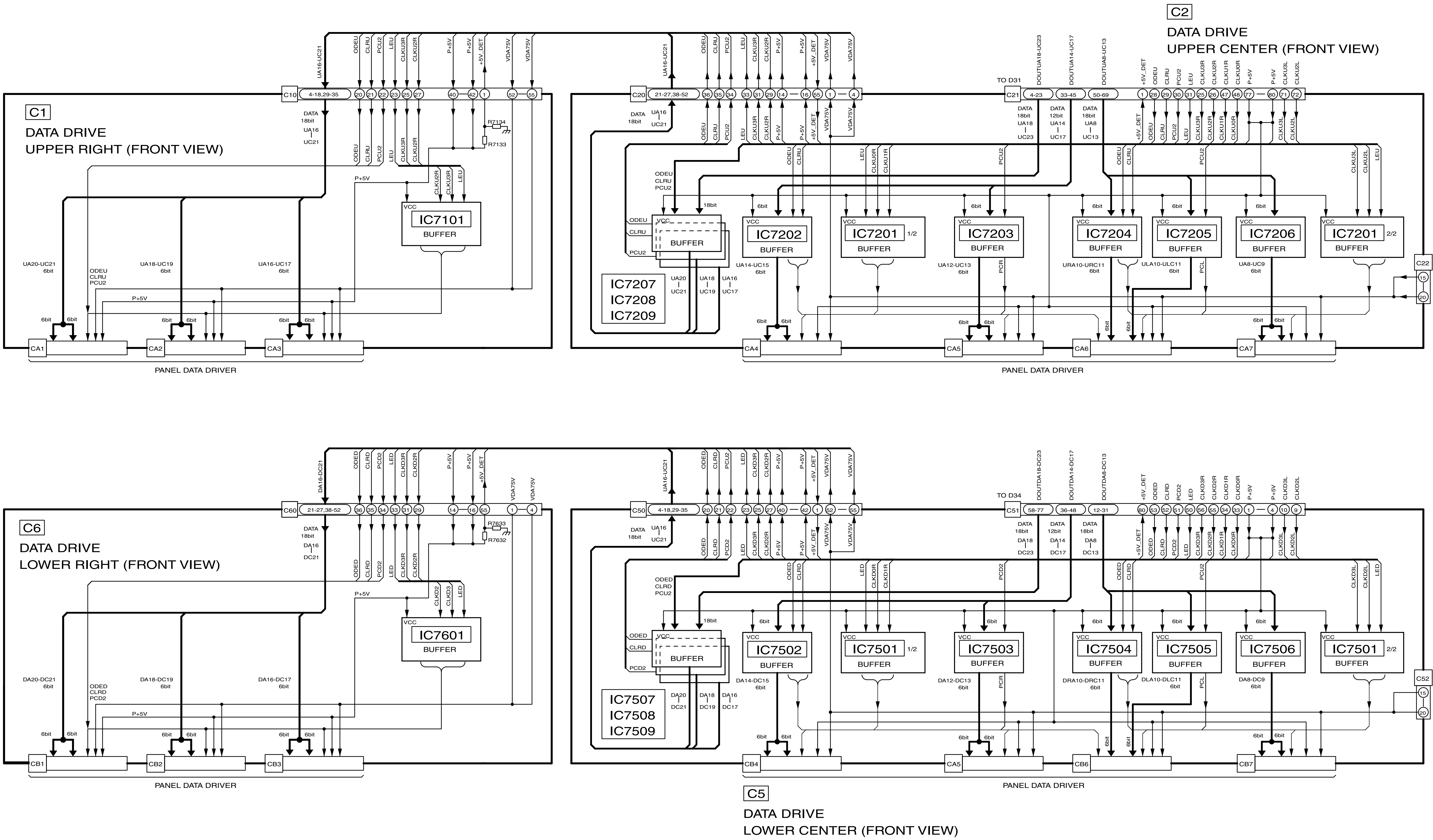
14.61. SD-Board (2 of 2) Schematic Diagram

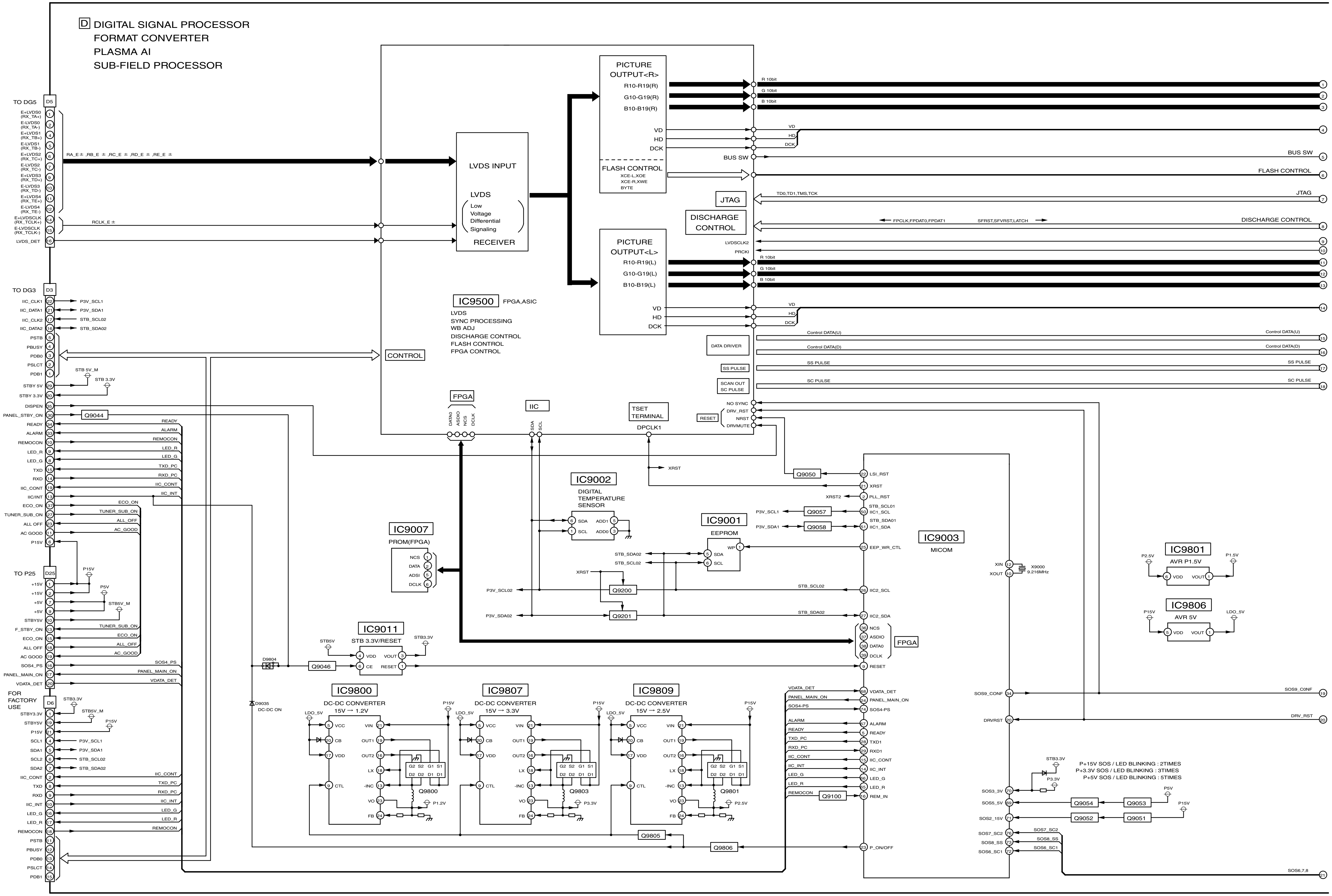
⚠ SD-BOARD TNPA3832 (2/2)


To 3rd 96pins of
SCAN ELECTRODES
SD3
SIDE
TERM
IC6954
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
IC6955
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
Vf
Vfo
Vf5
R6985 220k
C6967 50V 220p
R6963 220
C6958 16V 1u
C6968 50V 220p
R6967 220
C6961 16V 1u
AA_SO8
AA_CLK
AA_CL
AA_PRO
AA_SO9
AA_SO7
AA_SI
FSI
FCL
FCLK
PRO
R6973 22
R6972 22
R6974 22
C6981 50V 1000p
SD46
TO
SC-BOARD
(SC46)
FSI
FCL
FCLK
PRO
VF5V
VF5V
1
2
3
4
5
6


DOWN
To 4th 96pins of
SCAN ELECTRODES
SD3
SD4
SIDE
TERM
IC6955
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
IC6956
AN16071A-VT
PDP SCAN DRIVER
S/P
64bit
C6961
16V 1u
R6984
10k
D6951
MAZ80560HL
C6951
50V
1000p
R6971
100
C6963
16V 1u
AA_CLK
AA_CL
AA_PRO
AA_SO8
AA_SI
AA_CLK
AA_CL
AA_PRO
AA_SO7

TH-50PV60A
SD-Board (2 of 2) Schematic Diagram

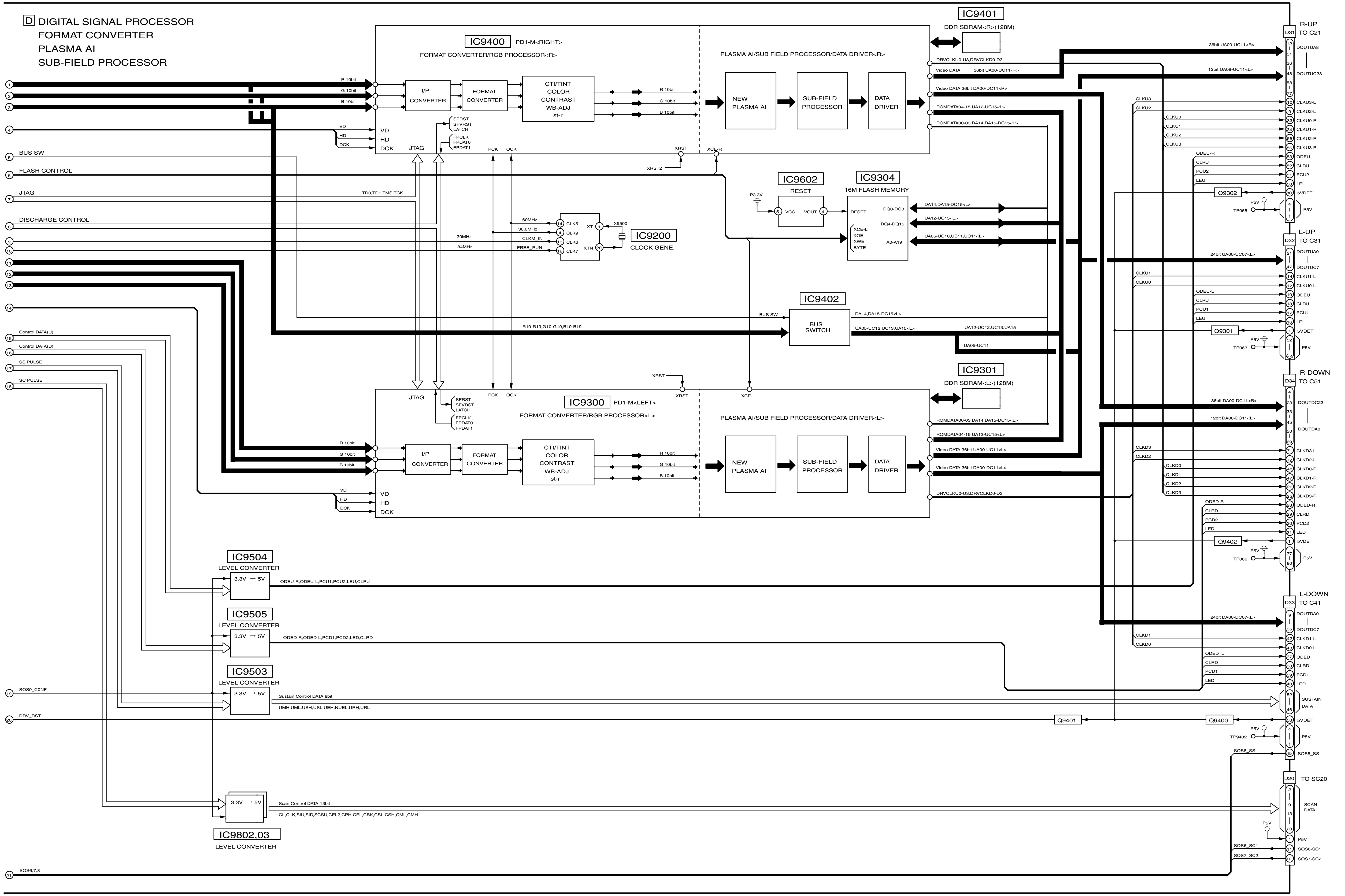

C1
DATA DRIVE
UPPER RIGHT (FRONT VIEW)
C2
DATA DRIVE
UPPER CENTER (FRONT VIEW)
C6
DATA DRIVE
LOWER RIGHT (FRONT VIEW)
C5
DATA DRIVE
LOWER CENTER (FRONT VIEW)
C10
C20
C21
C22
TO D31
TO C32
C60
C50
C51
C52
TO D34
TO C42
IC7101 BUFFER
IC7201 BUFFER 1/2
IC7201 BUFFER 2/2
IC7202 BUFFER
IC7203 BUFFER
IC7204 BUFFER
IC7205 BUFFER
IC7206 BUFFER
IC7207
IC7208
IC7209
IC7601 BUFFER
IC7501 BUFFER 1/2
IC7501 BUFFER 2/2
IC7502 BUFFER
IC7503 BUFFER
IC7504 BUFFER
IC7505 BUFFER
IC7506 BUFFER
IC7507
IC7508
IC7509
VCC
R7134
R7133
R7633
R7632
CA1
CA2
CA3
CA4
CA5
CA6
CA7
CB1
CB2
CB3
CB4
CB6
CB7
PANEL DATA DRIVER
ODEU
CLRU
PCU2
LEU
CLKU3R
CLKU2R
CLKU1R
CLKU0R
CLKU3L
CLKU2L
P+5V
+5V_DET
VDA75V
ODED
CLRD
PCD2
LED
CLKD3R
CLKD2R
CLKD1R
CLKD0R
CLKD3L
CLKD2L
UA16-UC21
DA16-DC21
DATA 18bit
DATA 12bit
DOUTUA18-UC23
DOUTUA14-UC17
DOUTUA8-UC13
DOUTDA18-DC23
DOUTDA14-DC17
DOUTDA8-DC13
UA20-UC21 6bit
UA18-UC19 6bit
UA16-UC17 6bit
UA14-UC15 6bit
UA12-UC13 6bit
URA10-URC11 6bit
ULA10-ULC11 6bit
UA8-UC9 6bit
DA20-DC21 6bit
DA18-DC19 6bit
DA16-DC17 6bit
DA14-DC15 6bit
DA12-DC13 6bit
DRA10-DRC11 6bit
DLA10-DLC11 6bit
DA8-DC9 6bit
PCR
PCL
6bit
18bit
4-18,29-35
21-27,38-52
4-23
33-45
50-69
58-77
36-48
12-31



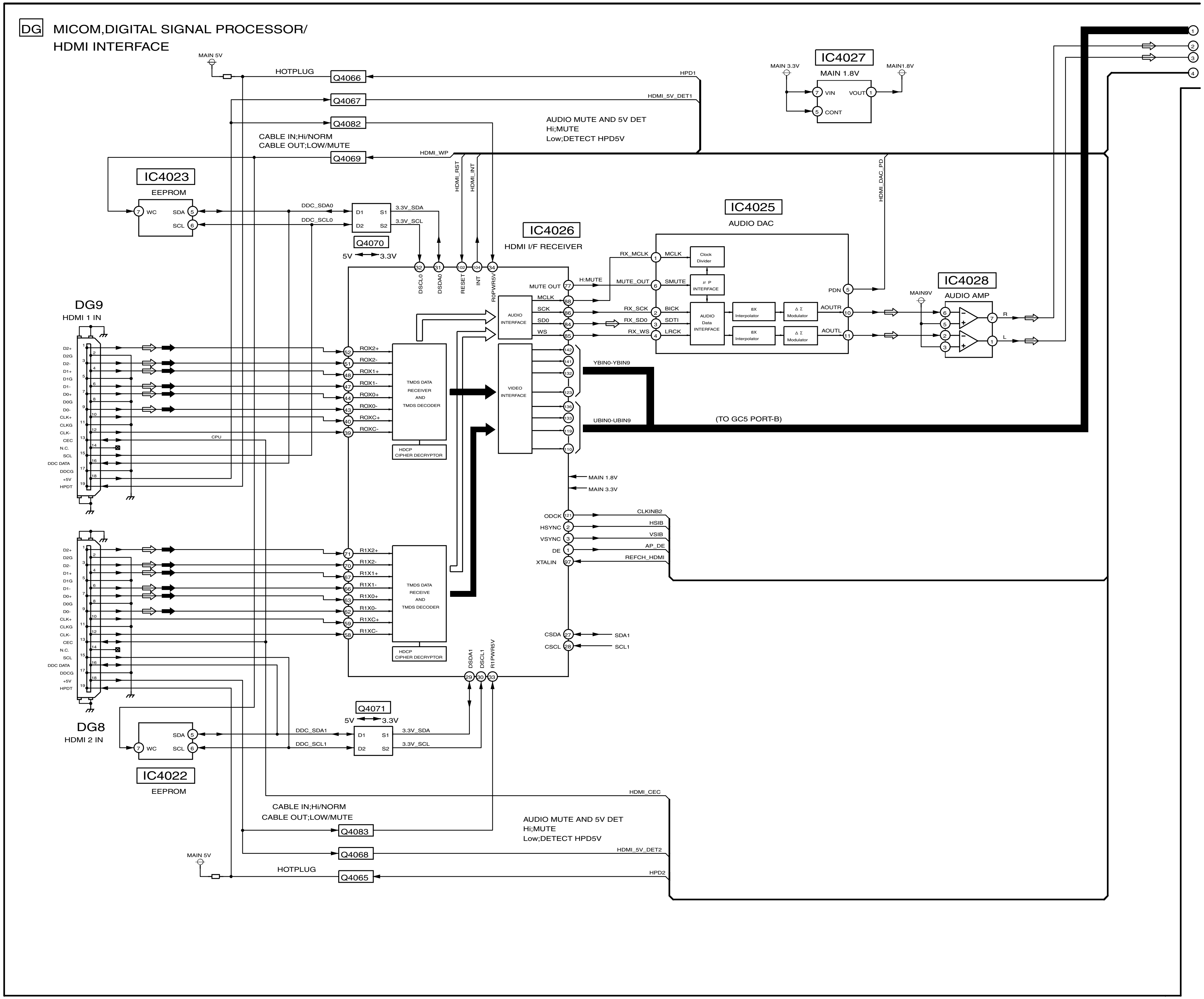
D DIGITAL SIGNAL PROCESSOR
FORMAT CONVERTER
PLASMA AI
SUB-FIELD PROCESSOR
TO DG5
D5
E+LVDS0 (RX_TA+)
E-LVDS0 (RX_TA-)
E+LVDS1 (RX_TB+)
E-LVDS1 (RX_TB-)
E+LVDS2 (RX_TC+)
E-LVDS2 (RX_TC-)
E+LVDS3 (RX_TD+)
E-LVDS3 (RX_TD-)
E+LVDS4 (RX_TE+)
E-LVDS4 (RX_TE-)
E+LVDSCLK (RX_TCLK+)
E-LVDSCLK (RX_TCLK-)
LVDS_DET
RA_E ± ,RB_E ± ,RC_E ± ,RD_E ± ,RE_E ±
RCLK_E ±
LVDS INPUT
LVDS
Low Voltage Differential Signaling
RECEIVER
PICTURE OUTPUT<R>
R10-R19(R)
G10-G19(R)
B10-B19(R)
VD
HD
DCK
FLASH CONTROL
XCE-L,XOE
XCE-R,XWE
BYTE
BUS SW
JTAG
DISCHARGE CONTROL
PICTURE OUTPUT<L>
R10-R19(L)
G10-G19(L)
B10-B19(L)
LVDSCLK2
PRCKI
R 10bit
G 10bit
B 10bit
TD0,TD1,TMS,TCK
FPCLK,FPDAT0,FPDAT1
SFRST,SFVRST,LATCH
DATA DRIVER
Control DATA(U)
Control DATA(D)
SS PULSE
SCAN OUT SC PULSE
SC PULSE
IC9500 FPGA,ASIC
LVDS
SYNC PROCESSING
WB ADJ
DISCHARGE CONTROL
FLASH CONTROL
FPGA CONTROL
CONTROL
FPGA
DATA0 ASDIO NCS DCLK
IIC
SDA SCL
TSET TERMINAL
DPCLK1
RESET
NO SYNC
DRV_RST
NRST
DRVMUTE
TO DG3
D3
IIC_CLK1
IIC_DATA1
IIC_CLK2
IIC_DATA2
P3V_SCL1
P3V_SDA1
STB_SCL02
STB_SDA02
PSTB
PBUSY
PDB0
PSLCT
PDB1
STB 5V_M
STB 3.3V
STBY 5V
STBY 3.3V
DISPEN
PANEL_STBY_ON
Q9044
READY
ALARM
REMOCON
LED_R
LED_G
TXD
RXD
IIC_CONT
IIC/INT
ECO_ON
TUNER_SUB_ON
ALL OFF
AC GOOD
P15V
TXD_PC
RXD_PC
IIC_INT
ALL_OFF
AC_GOOD
TO P25
D25
+15V
+5V
P5V
STB5V_M
STBY5V
F_STBY_ON
SOS4_PS
PANEL_MAIN_ON
VDATA_DET
FOR FACTORY USE
D6
STB3.3V
STBY3.3V
STBY5V
SCL1
SDA1
SCL2
SDA2
P3V_SCL1
P3V_SDA1
XRST
Q9050
IC9002
DIGITAL TEMPERATURE SENSOR
SDA ADD1
SCL ADD0
IC9001
EEPROM
WP
Q9057
Q9058
IC9007
PROM(FPGA)
NCS
DATA
ADSI
DCLK
P3V_SCL02
P3V_SDA02
Q9200
Q9201
IC9003
MICOM
LSI_RST
XRST2
PLL_RST
STB_SCL01
IIC1_SCL
STB_SDA01
IIC1_SDA
EEP_WR_CTL
IIC2_SCL
IIC2_SDA
ASDIO
DATA0
DCLK
FPGA
RESET
XIN
XOUT
X9000 9.216MHz
IC9011
STB 3.3V/RESET
STB5V
VDD
VOUT
CE
Q9046
D9804
D9035 DC-DC ON
IC9800
DC-DC CONVERTER 15V → 1.2V
IC9807
DC-DC CONVERTER 15V → 3.3V
IC9809
DC-DC CONVERTER 15V → 2.5V
LDO_5V
VCC
CB
VIN
OUT1
OUT2
LX
CTL
-INC
VO
FB
G2 S2 G1 S1
D2 D2 D1 D1
Q9800
Q9803
Q9801
P1.2V
P3.3V
P2.5V
Q9805
Q9806
VDATA_DET
PANEL_MAIN_ON
SOS4-PS
ALARM
READY
TXD1
RXD1
IIC_CONT
IIC_INT
LED_G
LED_R
REMOCON
Q9100
REM_IN
P_ON/OFF
SOS9_CONF
DRVRST
DRV_RST
SOS3_3V
SOS5_5V
SOS2_15V
SOS7_SC2
SOS8_SS
SOS6_SC1
SOS6,7,8
P3.3V
Q9054
Q9053
Q9052
Q9051
P+15V SOS / LED BLINKING : 2TIMES
P+3.3V SOS / LED BLINKING : 3TIMES
P+5V SOS / LED BLINKING : 5TIMES
IC9801
AVR P1.5V
P2.5V
P1.5V
IC9806
AVR 5V
LDO_5V

TH-50PV60A
D-Board (1 of 2) Block Diagram

TH-50PV60A
D-Board (1 of 2) Block Diagram

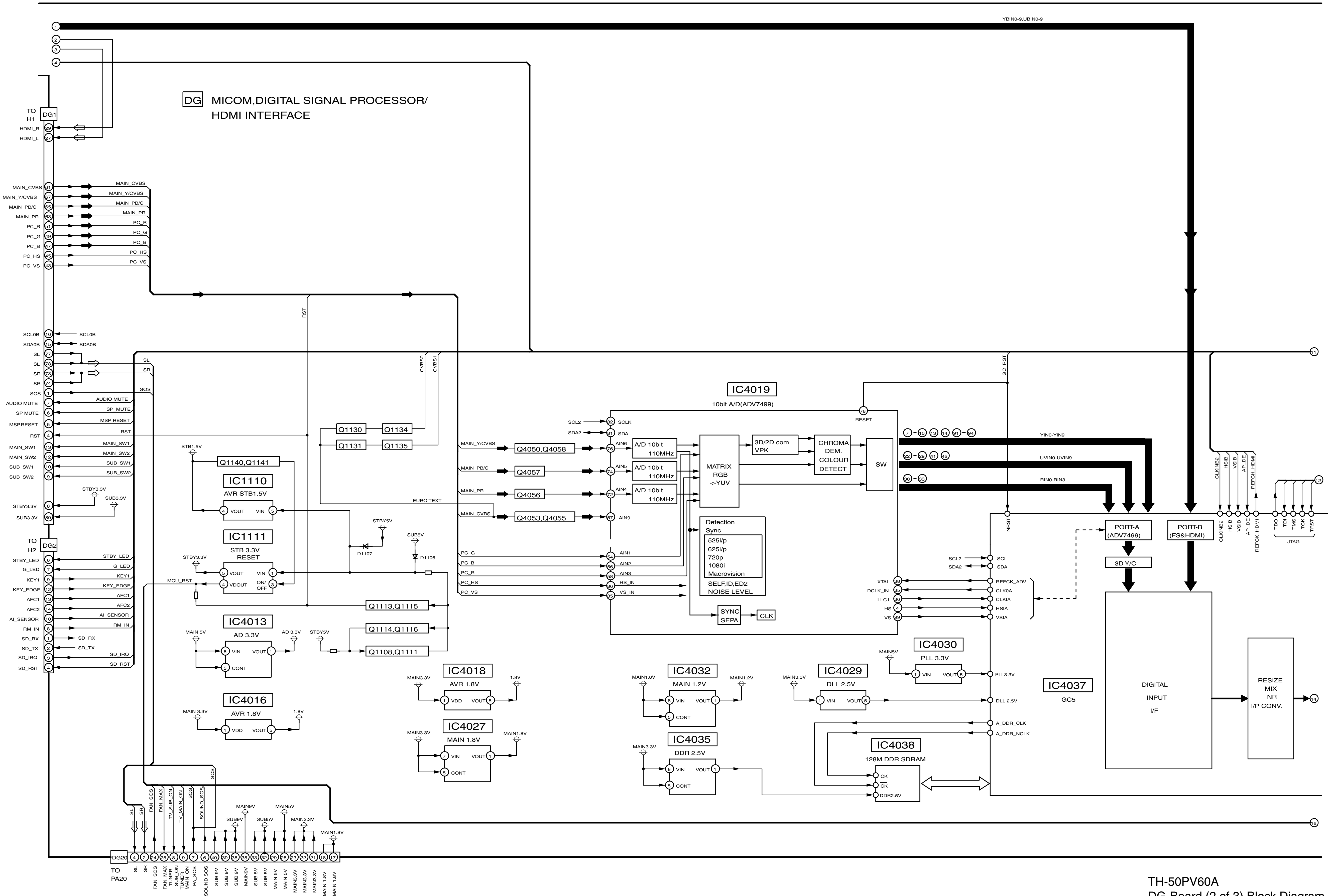

D DIGITAL SIGNAL PROCESSOR
FORMAT CONVERTER
PLASMA AI
SUB-FIELD PROCESSOR
IC9400 PD1-M<RIGHT>
FORMAT CONVERTER/RGB PROCESSOR<R>
PLASMA AI/SUB FIELD PROCESSOR/DATA DRIVER<R>
I/P CONVERTER
FORMAT CONVERTER
CTI/TINT COLOR CONTRAST WB-ADJ st-r
NEW PLASMA AI
SUB-FIELD PROCESSOR
DATA DRIVER
VD
HD
DCK
JTAG
PCK
OCK
XRST
XCE-R
XRST2
SFRST SFVRST LATCH
FPCLK FPDAT0 FPDAT1
R 10bit
G 10bit
B 10bit
IC9401
DDR SDRAM<R>(128M)
DRVCLKU0-U3,DRVCLKD0-D3
Video DATA 36bit UA00-UC11<R>
Video DATA 36bit DA00-DC11<R>
ROMDATA04-15 UA12-UC15<L>
ROMDATA00-03 DA14,DA15-DC15<L>
BUS SW
FLASH CONTROL
JTAG
TD0,TD1,TMS,TCK
DISCHARGE CONTROL
20MHz
84MHz
60MHz
36.6MHz
CLKM_IN
FREE_RUN
CLK5
CLK9
CLK6
CLK7
XT
XTN
X9500
IC9200
CLOCK GENE.
IC9602
RESET
P3.3V
VCC
VOUT
IC9304
16M FLASH MEMORY
RESET
XCE-L XOE XWE BYTE
DQ0-DQ3
DQ4-DQ15
A0-A19
DA14,DA15-DC15<L>
UA12-UC15<L>
UA05-UC10,UB11,UC11<L>
IC9402
BUS SWITCH
R10-R19,G10-G19,B10-B19
DA14,DA15-DC15<L>
UA05-UC12,UC13,UA15<L>
UA12-UC12,UC13,UA15
UA05-UC11
Control DATA(U)
Control DATA(D)
SS PULSE
SC PULSE
IC9300 PD1-M<LEFT>
FORMAT CONVERTER/RGB PROCESSOR<L>
PLASMA AI/SUB FIELD PROCESSOR/DATA DRIVER<L>
XCE-L
IC9301
DDR SDRAM<L>(128M)
ROMDATA00-03 DA14,DA15-DC15<L>
ROMDATA04-15 UA12-UC15<L>
Video DATA 36bit UA00-UC11<L>
Video DATA 36bit DA00-DC11<L>
DRVCLKU0-U3,DRVCLKD0-D3
IC9504
LEVEL CONVERTER
3.3V → 5V
ODEU-R,ODEU-L,PCU1,PCU2,LEU,CLRU
IC9505
LEVEL CONVERTER
ODED-R,ODED-L,PCD1,PCD2,LED,CLRD
IC9503
LEVEL CONVERTER
SOS9_CONF
Sustain Control DATA 8bit
UMH,UML,USH,USL,UEH,NUEL,URH,URL
DRV_RST
Q9401
Q9400
IC9802,03
LEVEL CONVERTER
Scan Control DATA 13bit
CL,CLK,SIU,SID,SCSU,CEL2,CPH,CEL,CBK,CSL,CSH,CML,CMH
SOS6,7,8
R-UP
TO C21
D31
36bit UA00-UC11<R>
12bit UA08-UC11<L>
DOUTUA8
DOUTUC23
CLKU3-L
CLKU2-L
CLKU0-R
CLKU1-R
CLKU2-R
CLKU3-R
ODEU
CLRU
PCU2
LEU
5VDET
Q9302
P5V
TP065
L-UP
TO C31
D32
24bit UA00-UC07<L>
DOUTUA0
DOUTUC7
CLKU1-L
CLKU0-L
ODEU
CLRU
PCU1
LEU
5VDET
Q9301
TP063
R-DOWN
TO C51
D34
36bit DA00-DC11<R>
12bit DA08-DC11<L>
DOUTDC23
DOUTDA8
CLKD3-L
CLKD2-L
CLKD0-R
CLKD1-R
CLKD2-R
CLKD3-R
ODED-R
CLRD
PCD2
LED
5VDET
Q9402
TP066
L-DOWN
TO C41
D33
24bit DA00-DC07<L>
DOUTDA0
DOUTDC7
CLKD1-L
CLKD0-L
ODED
CLRD
PCD1
LED
SUSTAIN DATA
5VDET
TP9402
SOS8_SS
D20
TO SC20
SCAN DATA
P5V
SOS6-SC1
SOS7-SC2
SOS6_SC1
SOS7_SC2

TH-50PV60A
D-Board (2 of 2) Block Diagram


DG
MICOM,DIGITAL SIGNAL PROCESSOR/
HDMI INTERFACE
MAIN 5V
HOTPLUG
Q4066
HPD1
Q4067
HDMI_5V_DET1
Q4082
AUDIO MUTE AND 5V DET
Hi;MUTE
Low;DETECT HPD5V
CABLE IN;Hi/NORM
CABLE OUT;LOW/MUTE
Q4069
HDMI_WP
IC4023
EEPROM
WC
SDA
SCL
DDC_SDA0
DDC_SCL0
D1
S1
D2
S2
Q4070
5V
3.3V
3.3V_SDA
3.3V_SCL
HDMI_RST
HDMI_INT
DSCL0
DSDA0
RESET
INT
R0PWR5V
IC4026
HDMI I/F RECEIVER
MUTE OUT
MCLK
SCK
SD0
WS
AUDIO INTERFACE
VIDEO INTERFACE
TMDS DATA RECEIVER AND TMDS DECODER
HDCP CIPHER DECRYPTOR
TMDS DATA RECEIVE AND TMDS DECODER
IC4027
MAIN 1.8V
MAIN 3.3V
MAIN1.8V
VIN
VOUT
CONT
HDMI_DAC_PD
IC4025
AUDIO DAC
RX_MCLK
H:MUTE
MUTE_OUT
RX_SCK
RX_SD0
RX_WS
MCLK
SMUTE
BICK
SDTI
LRCK
Clock Divider
μP INTERFACE
AUDIO Data INTERFACE
8X Interpolator
ΔΣ Modulator
PDN
AOUTR
AOUTL
IC4028
AUDIO AMP
MAIN9V
R
L
DG9
HDMI 1 IN
D2+
D2G
D2-
D1+
D1G
D1-
D0+
D0G
D0-
CLK+
CLKG
CLK-
CEC
N.C.
SCL
DDC DATA
DDCG
+5V
HPDT
CPU
ROX2+
ROX2-
ROX1+
ROX1-
ROX0+
ROX0-
ROXC+
ROXC-
YBIN0-YBIN9
UBIN0-UBIN9
(TO GC5 PORT-B)
MAIN 1.8V
MAIN 3.3V
ODCK
HSYNC
VSYNC
DE
XTALIN
CLKINB2
HSIB
VSIB
AP_DE
REFCH_HDMI
CSDA
CSCL
SDA1
SCL1
DG8
HDMI 2 IN
R1X2+
R1X2-
R1X1+
R1X1-
R1X0+
R1X0-
R1XC+
R1XC-
DSDA1
DSCL1
R1PWR5V
Q4071
5V
3.3V
DDC_SDA1
DDC_SCL1
3.3V_SDA
3.3V_SCL
IC4022
EEPROM
HDMI_CEC
CABLE IN;Hi/NORM
CABLE OUT;LOW/MUTE
Q4083
AUDIO MUTE AND 5V DET
Hi;MUTE
Low;DETECT HPD5V
Q4068
HDMI_5V_DET2
MAIN 5V
HOTPLUG
Q4065
HPD2

TH-50PV60A
DG-Board (1 of 3) Block Diagram

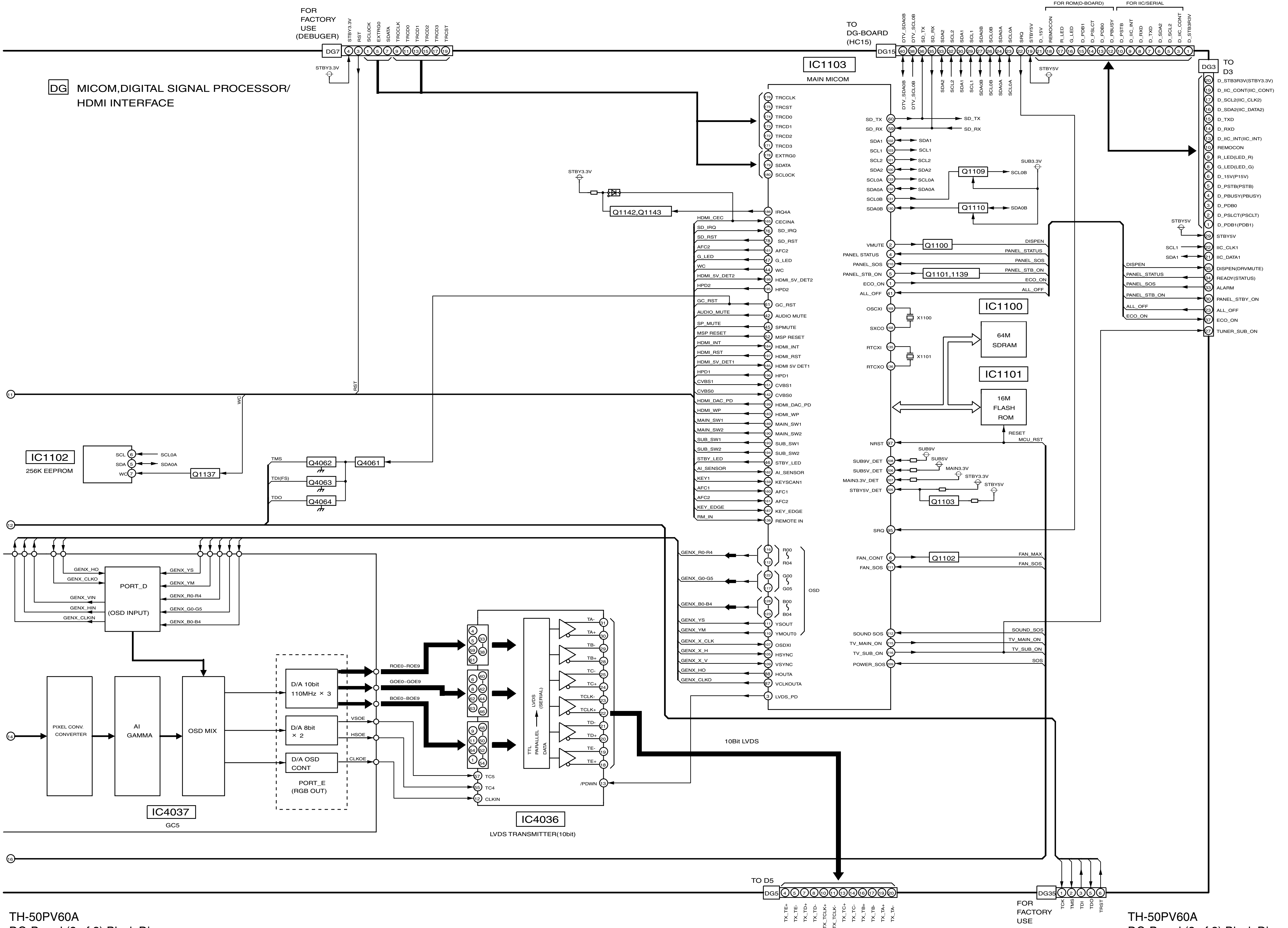
TH-50PV60A
DG-Board (1 of 3) Block Diagram


YBIN0-9,UBIN0-9
DG MICOM,DIGITAL SIGNAL PROCESSOR/ HDMI INTERFACE
TO H1
DG1
HDMI_R 29
HDMI_L 27
MAIN_CVBS 61
MAIN_Y/CVBS 67
MAIN_PB/C 65
MAIN_PR 63
PC_R 51
PC_G 49
PC_B 47
PC_HS 45
PC_VS 43
SCL0B 16
SDA0B 15
SL 77
SL 78
SR 73
SR 74
SOS 1
AUDIO MUTE 7
SP MUTE 6
MSP.RESET 5
RST 4
MAIN_SW1 13
MAIN_SW2 12
SUB_SW1 10
SUB_SW2 9
STBY3.3V 8
SUB3.3V 80
TO H2
DG2
STBY_LED 6
G_LED 7
KEY1 9
KEY_EDGE 12
AFC1 13
AFC2 14
AI_SENSOR 10
RM_IN 8
SD_RX 1
SD_TX 2
SD_IRQ 3
SD_RST 4
RST
CVBS0
CVBS1
EURO TEXT
MCU_RST
STB1.5V
STBY3.3V
SUB3.3V
STBY5V
SUB5V
D1107
D1106
Q1130
Q1134
Q1131
Q1135
Q1140,Q1141
IC1110
AVR STB1.5V
VOUT
VIN
IC1111
STB 3.3V RESET
VDOUT
ON/OFF
Q1113,Q1115
Q1114,Q1116
Q1108,Q1111
IC4013
AD 3.3V
MAIN 5V
CONT
IC4016
AVR 1.8V
MAIN 3.3V
1.8V
VDD
IC4018
AVR 1.8V
MAIN3.3V
IC4027
MAIN 1.8V
MAIN1.8V
IC4032
MAIN 1.2V
MAIN1.2V
IC4035
DDR 2.5V
IC4029
DLL 2.5V
IC4030
PLL 3.3V
MAIN5V
IC4038
128M DDR SDRAM
CK
DDR2.5V
IC4019
10bit A/D(ADV7499)
SCL2
SDA2
SCLK
SDA
RESET
AIN6
AIN5
AIN4
AIN9
AIN1
AIN2
AIN3
HS_IN
VS_IN
Q4050,Q4058
Q4057
Q4056
Q4053,Q4055
A/D 10bit 110MHz
MATRIX RGB ->YUV
3D/2D com VPK
CHROMA DEM. COLOUR DETECT
SW
Detection Sync
525i/p
625i/p
720p
1080i
Macrovision
SELF,ID,ED2 NOISE LEVEL
SYNC SEPA
CLK
XTAL
DCLK_IN
LLC1
HS
VS
YIN0-YIN9
UVIN0-UVIN9
RIN0-RIN3
GC_RST
NRST
CLKINB2
HSIB
VSIB
AP_DE
REFCK_HDMI
TDO
TDI
TMS
TCK
TRST
JTAG
PORT-A (ADV7499)
PORT-B (FS&HDMI)
3D Y/C
SCL
SDA
REFCK_ADV
CLK0A
CLKIA
HSIA
VSIA
PLL3.3V
DLL 2.5V
A_DDR_CLK
A_DDR_NCLK
IC4037
GC5
DIGITAL INPUT I/F
RESIZE MIX NR I/P CONV.
DG20
TO PA20
SL
SR
FAN_SOS
FAN_MAX
TUNER SUB_ON
TUNER MAIN_ON
PA_SOS
SOUND SOS
SUB 9V
MAIN9V
SUB 5V
MAIN 5V
MAIN 3.3V
MAIN 1.8V
TV_SUB_ON
TV_MAIN_ON
SOS
SUB9V
SUB5V
MAIN3.3V
1
2
3
4
11
12
14
16

TH-50PV60A DG-Board (2 of 3) Block Diagram

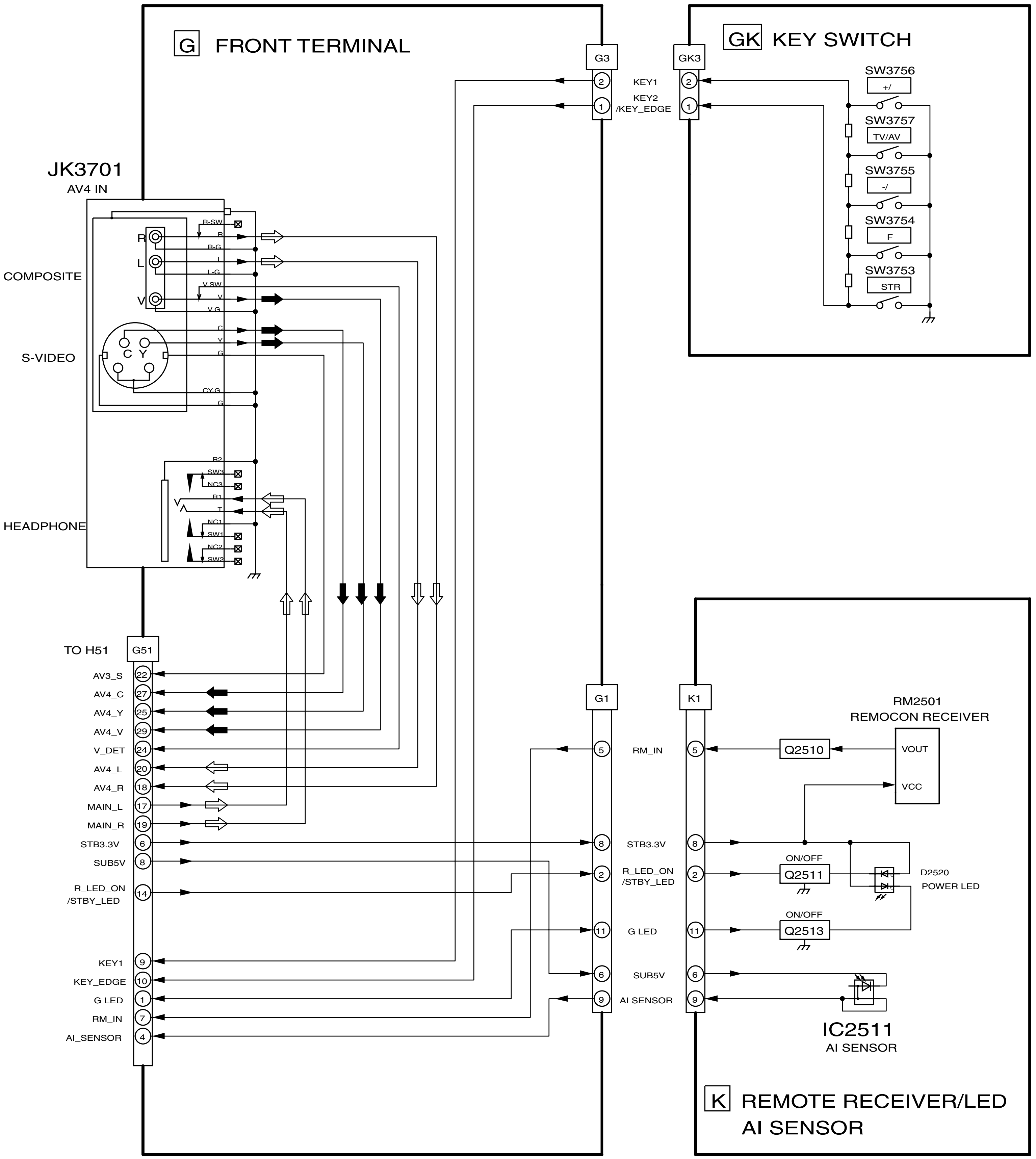
TH-50PV60A
DG-Board (2 of 3) Block Diagram

DG MICOM,DIGITAL SIGNAL PROCESSOR/ HDMI INTERFACE

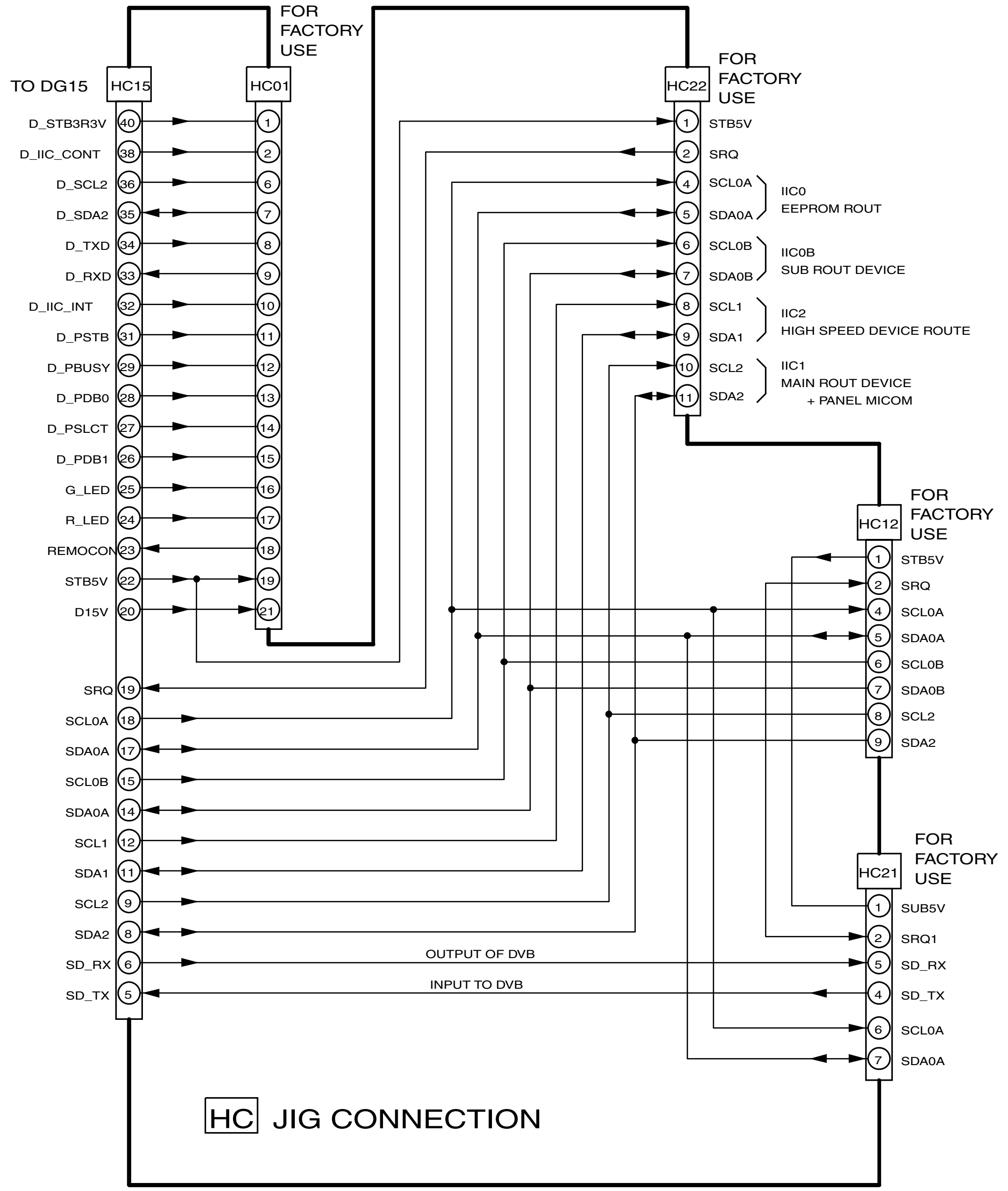

FOR FACTORY USE (DEBUGER)
DG7
STBY3.3V
RST
SCLOCK
EXTRG0
SDATA
TRCCLK
TRCD0
TRCD1
TRCD2
TRCD3
TRCST
TO DG-BOARD (HC15)
DG15
DTV_SDA0B
DTV_SCL0B
SD_TX
SD_RX
SDA2
SCL2
SDA1
SCL1
SDA0B
SCL0B
SDA0A
SCL0A
SRQ
STBY5V
D_15V
REMOCON
R_LED
G_LED
D_PDB1
D_PSLCT
D_PDB0
D_PBUSY
D_PSTB
D_IIC_INT
D_RXD
D_TXD
D_SDA2
D_SCL2
D_IIC_CONT
D_STB3R3V
FOR ROM(D-BOARD)
FOR IIC/SERIAL
TO D3
DG3
IC1103
MAIN MICOM
TRCCLK
TRCST
TRCD0
TRCD1
TRCD2
TRCD3
EXTRG0
SDATA
SCLOCK
IRQ4A
CECINA
SD_IRQ
SD_RST
AFC2
G_LED
WC
HDMI_5V_DET2
HPD2
GC_RST
AUDIO MUTE
SPMUTE
MSP RESET
HDMI_INT
HDMI_RST
HDMI 5V DET1
HPD1
CVBS1
CVBS0
HDMI_DAC_PD
HDMI_WP
MAIN_SW1
MAIN_SW2
SUB_SW1
SUB_SW2
STBY_LED
AI_SENSOR
KEYSCAN1
AFC1
AFC2
KEY_EDGE
REMOTE IN
HDMI_CEC
AUDIO_MUTE
SP_MUTE
KEY1
RM_IN
Q1142,Q1143
STBY3.3V
SD_TX
SD_RX
SDA1
SCL1
SCL2
SDA2
SCL0A
SDA0A
SCL0B
SDA0B
Q1109
Q1110
SUB3.3V
VMUTE
PANEL STATUS
PANEL_SOS
PANEL_STB_ON
ECO_ON
ALL_OFF
Q1100
Q1101,1139
DISPEN
PANEL_STATUS
PANEL_SOS
PANEL_STB_ON
OSCXI
SXCO
RTCXI
RTCXO
X1100
X1101
IC1100
64M SDRAM
IC1101
16M FLASH ROM
RESET
MCU_RST
NRST
SUB9V_DET
SUB5V_DET
MAIN3.3V_DET
STBY5V_DET
SUB9V
SUB5V
MAIN3.3V
STBY3.3V
STBY5V
Q1103
SRQ
FAN_CONT
FAN_SOS
Q1102
FAN_MAX
SOUND SOS
TV_MAIN_ON
TV_SUB_ON
POWER_SOS
SOUND_SOS
SOS
D_STB3R3V(STBY3.3V)
D_IIC_CONT(IIC_CONT)
D_SCL2(IIC_CLK2)
D_SDA2(IIC_DATA2)
D_TXD
D_RXD
D_IIC_INT(IIC_INT)
REMOCON
R_LED(LED_R)
G_LED(LED_G)
D_15V(P15V)
D_PSTB(PSTB)
D_PBUSY(PBUSY)
D_PDB0
D_PSLCT(PSCLT)
D_PDB1(PDB1)
STBY5V
IIC_CLK1
IIC_DATA1
DISPEN(DRVMUTE)
READY(STATUS)
ALARM
PANEL_STBY_ON
ALL_OFF
ECO_ON
TUNER_SUB_ON
IC1102
256K EEPROM
SCL
SDA
WC
SCL0A
SDA0A
Q1137
TMS
TDI(FS)
TDO
Q4062
Q4063
Q4064
Q4061
GENX_R0-R4
GENX_G0-G5
GENX_B0-B4
R00
R04
G00
G05
B00
B04
OSD
GENX_YS
GENX_YM
GENX_X_CLK
GENX_X_H
GENX_X_V
GENX_HO
GENX_CLKO
YSOUT
YMOUT0
OSDXI
HSYNC
VSYNC
HOUTA
VCLKOUTA
LVDS_PD
PORT_D
(OSD INPUT)
GENX_VIN
GENX_HIN
GENX_CLKIN
PIXEL CONV. CONVERTER
AI GAMMA
OSD MIX
D/A 10bit 110MHz × 3
D/A 8bit × 2
D/A OSD CONT
PORT_E (RGB OUT)
ROE0-ROE9
GOE0-GOE9
BOE0-BOE9
VSOE
HSOE
CLKOE
IC4037
GC5
TC5
TC4
CLKIN
TTL PARALLEL DATA
LVDS (SERIAL)
TA-
TA+
TB-
TB+
TC-
TC+
TCLK-
TCLK+
TD-
TD+
TE-
TE+
/PDWN
IC4036
LVDS TRANSMITTER(10bit)
10Bit LVDS
TO D5
DG5
TX_TE+
TX_TE-
TX_TD+
TX_TD-
TX_TCLK+
TX_TCLK-
TX_TC+
TX_TC-
TX_TB+
TX_TB-
TX_TA+
TX_TA-
DG35
FOR FACTORY USE
TCK
TMS
TDI
TDO
TRST

TH-50PV60A
DG-Board (3 of 3) Block Diagram

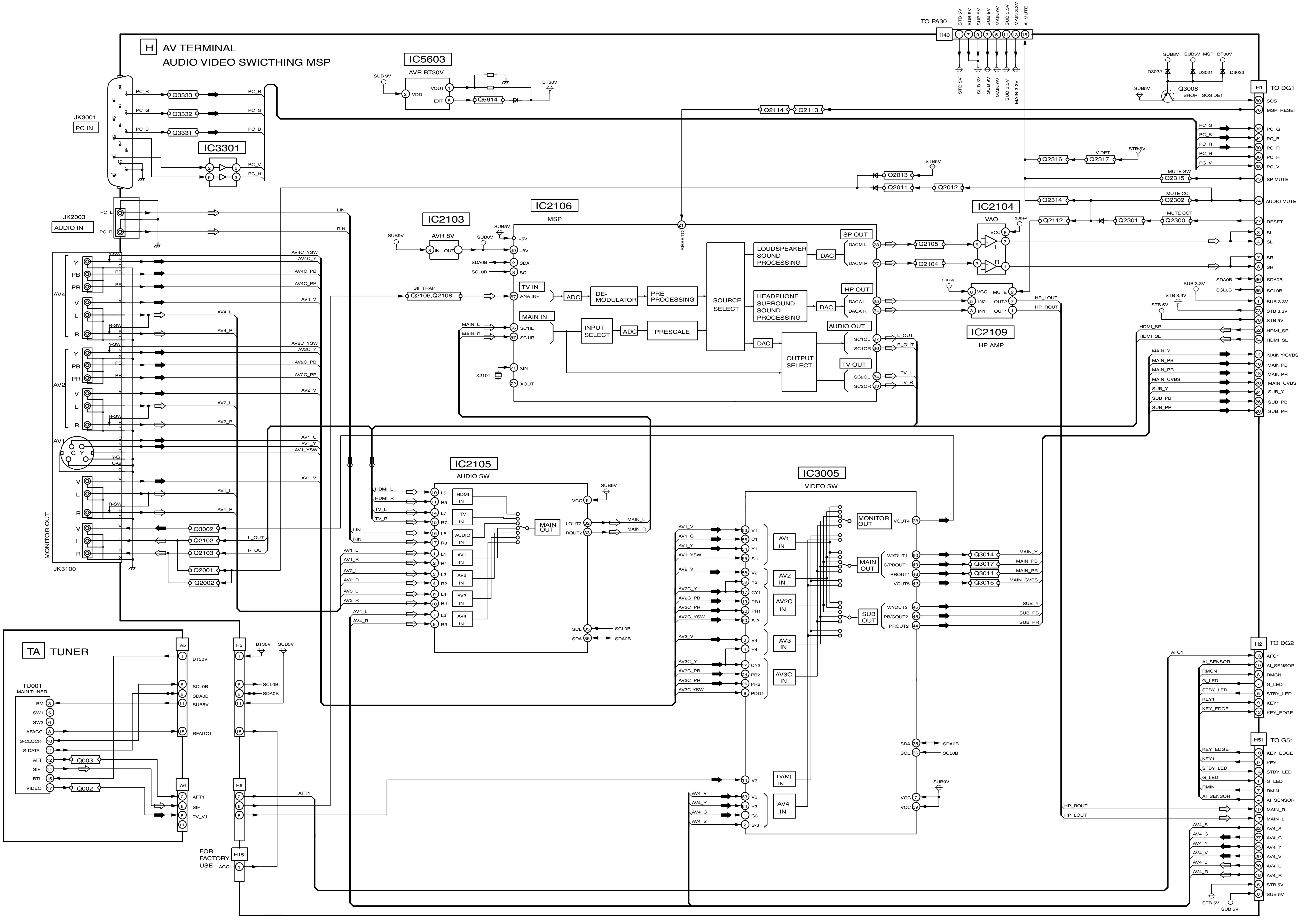
TH-50PV60A
DG-Board (3 of 3) Block Diagram


G FRONT TERMINAL
G3
KEY1
KEY2 /KEY_EDGE
GK KEY SWITCH
GK3
SW3756
+/
SW3757
TV/AV
SW3755
-/
SW3754
F
SW3753
STR
JK3701
AV4 IN
COMPOSITE
R
L
V
S-VIDEO
C
Y
HEADPHONE
R-SW
R
R-G
L
L-G
V-SW
V
V-G
C
Y
G
CY-G
G
R2
SW3
NC3
R1
T
NC1
SW1
NC2
SW2
TO H51
G51
AV3_S 22
AV4_C 27
AV4_Y 25
AV4_V 29
V_DET 24
AV4_L 20
AV4_R 18
MAIN_L 17
MAIN_R 19
STB3.3V 6
SUB5V 8
R_LED_ON /STBY_LED 14
KEY1 9
KEY_EDGE 10
G LED 1
RM_IN 7
AI_SENSOR 4
G1
K1
5 RM_IN 5
8 STB3.3V 8
2 R_LED_ON /STBY_LED 2
11 G LED 11
6 SUB5V 6
9 AI SENSOR 9
RM2501
REMOCON RECEIVER
VOUT
VCC
Q2510
ON/OFF
Q2511
ON/OFF
Q2513
D2520
POWER LED
IC2511
AI SENSOR
K REMOTE RECEIVER/LED AI SENSOR

TH-50PV60A
G, GK, K, and HC-Board Block Diagram

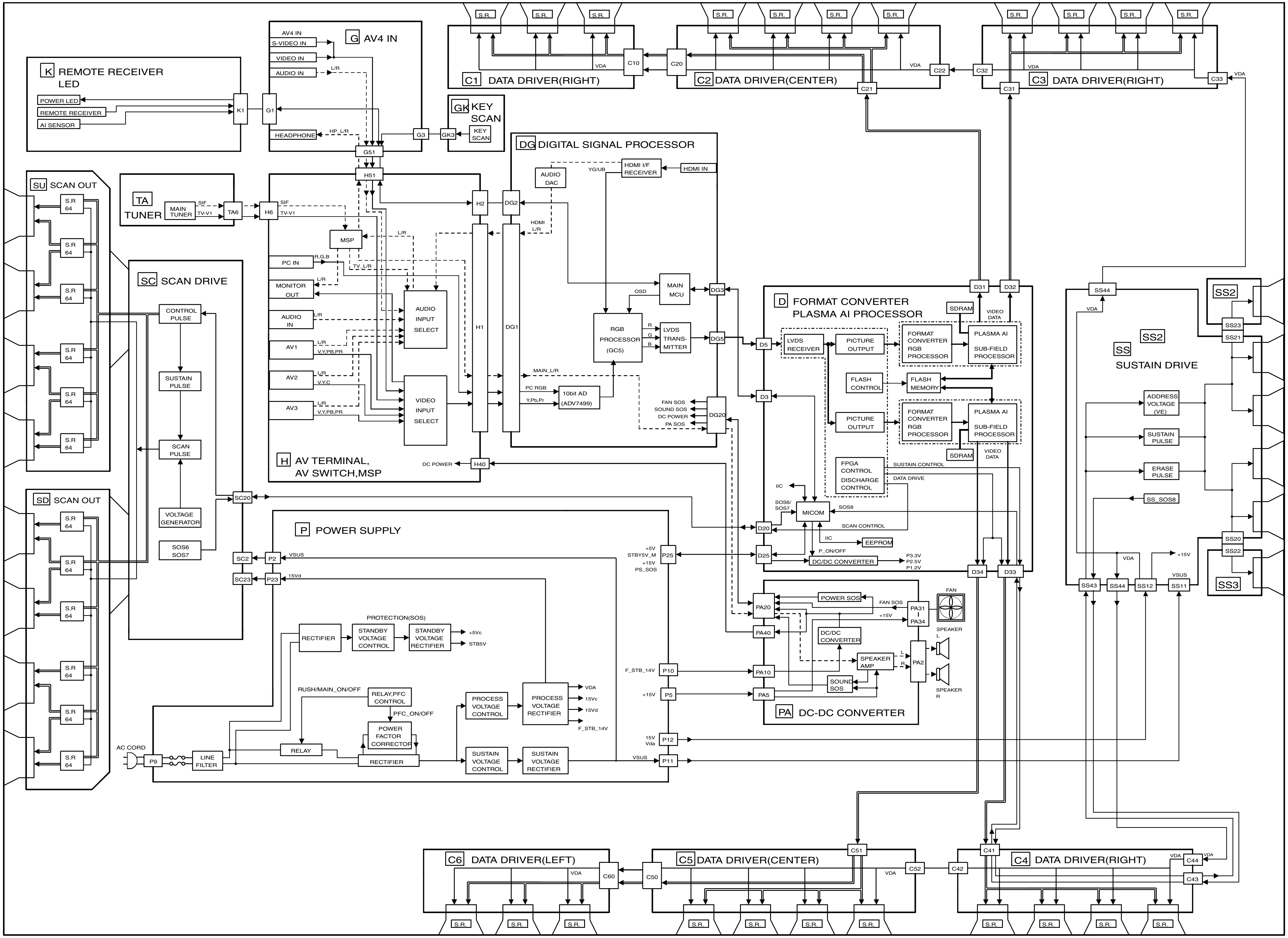

TO DG15
HC15
HC01
FOR FACTORY USE
HC22
FOR FACTORY USE
D_STB3R3V 40
D_IIC_CONT 38
D_SCL2 36
D_SDA2 35
D_TXD 34
D_RXD 33
D_IIC_INT 32
D_PSTB 31
D_PBUSY 29
D_PDB0 28
D_PSLCT 27
D_PDB1 26
G_LED 25
R_LED 24
REMOCON 23
STB5V 22
D15V 20
SRQ 19
SCL0A 18
SDA0A 17
SCL0B 15
SDA0A 14
SCL1 12
SDA1 11
SCL2 9
SDA2 8
SD_RX 6
SD_TX 5
1 2 6 7 8 9 10 11 12 13 14 15 16 17 18 19 21
1 STB5V
2 SRQ
4 SCL0A
5 SDA0A
IIC0
EEPROM ROUT
6 SCL0B
7 SDA0B
IIC0B
SUB ROUT DEVICE
8 SCL1
9 SDA1
IIC2
HIGH SPEED DEVICE ROUTE
10 SCL2
11 SDA2
IIC1
MAIN ROUT DEVICE + PANEL MICOM
HC12
FOR FACTORY USE
1 STB5V
2 SRQ
4 SCL0A
5 SDA0A
6 SCL0B
7 SDA0B
8 SCL2
9 SDA2
HC21
FOR FACTORY USE
1 SUB5V
2 SRQ1
5 SD_RX
4 SD_TX
6 SCL0A
7 SDA0A
OUTPUT OF DVB
INPUT TO DVB
HC JIG CONNECTION

TH-50PV60A
G, GK, K, and HC-Board Block Diagram


H
AV TERMINAL
AUDIO VIDEO SWICTHING MSP
IC5603
AVR BT30V
IC3301
JK3001
PC IN
JK2003
AUDIO IN
AV4
AV2
AV1
MONITOR OUT
JK3100
IC2103
AVR 8V
IC2106
MSP
TV IN
MAIN IN
DE-MODULATOR
PRE-PROCESSING
INPUT SELECT
PRESCALE
SOURCE SELECT
LOUDSPEAKER SOUND PROCESSING
HEADPHONE SURROUND SOUND PROCESSING
OUTPUT SELECT
SP OUT
HP OUT
AUDIO OUT
TV OUT
IC2104
VAO
IC2109
HP AMP
IC2105
AUDIO SW
IC3005
VIDEO SW
MONITOR OUT
MAIN OUT
SUB OUT
TO PA30
H40
H1
TO DG1
H2
TO DG2
H51
TO G51
TA
TUNER
TU001
MAIN TUNER
TA5
TA6
H5
H6
H15
FOR FACTORY USE

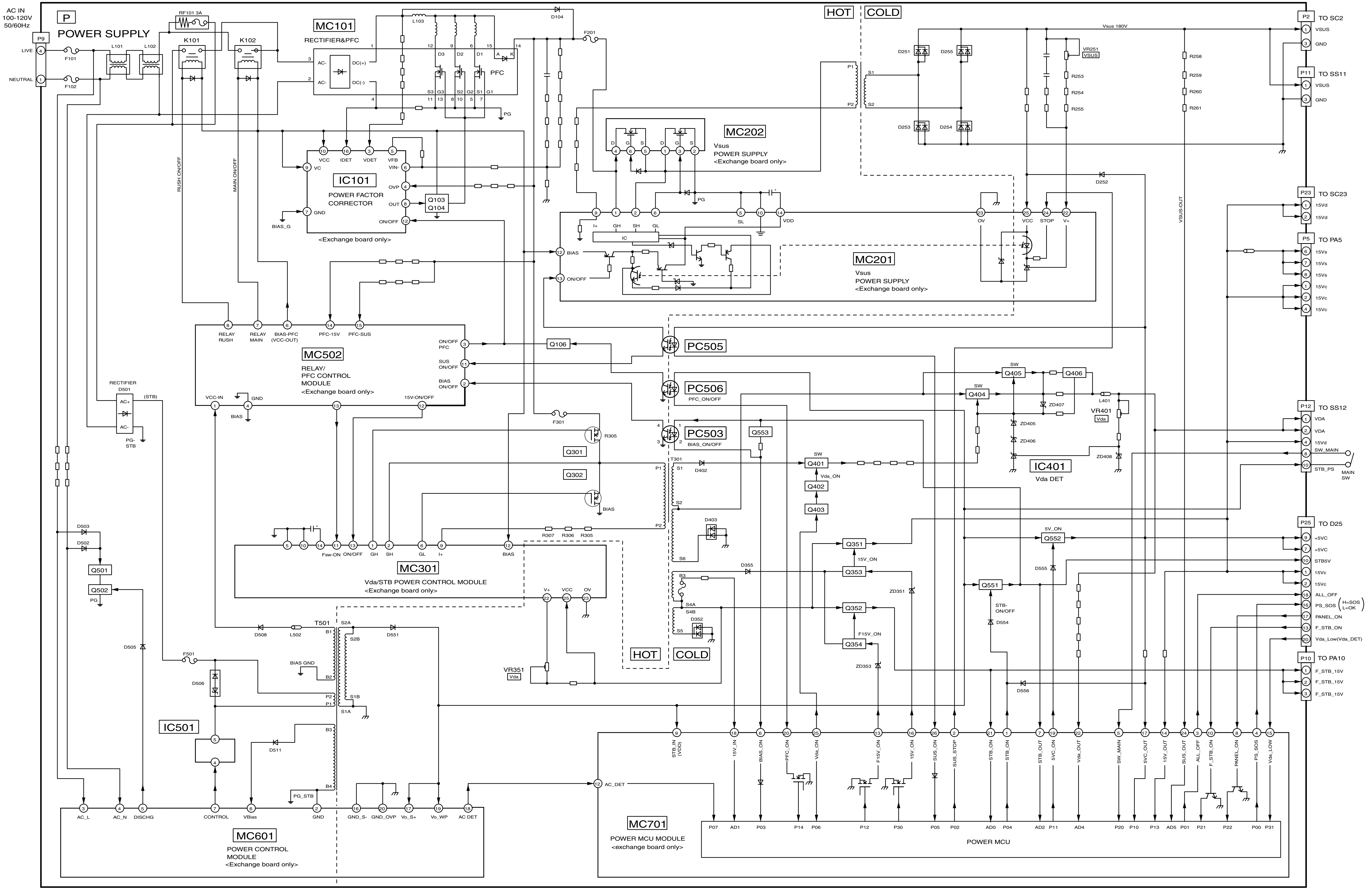
TH-50PV60A H and TA-Board Block Diagram

TH-50PV60A H and TA-Board Block Diagram


S.R.
C1 DATA DRIVER(RIGHT)
C10
VDA
C2 DATA DRIVER(CENTER)
C20
C21
C22
C3 DATA DRIVER(RIGHT)
C31
C32
C33
K REMOTE RECEIVER LED
POWER LED
REMOTE RECEIVER
AI SENSOR
K1
G1
G AV4 IN
AV4 IN
S-VIDEO IN
VIDEO IN
AUDIO IN
L/R
HEADPHONE
HP_L/R
G3
G51
GK KEY SCAN
GK3
KEY SCAN
DG DIGITAL SIGNAL PROCESSOR
AUDIO DAC
YG/UB
HDMI I/F RECEIVER
HDMI IN
HDMI L/R
MAIN MCU
OSD
RGB PROCESSOR (GC5)
R
G
B
LVDS TRANS-MITTER
DG2
DG3
DG5
DG1
DG20
MAIN_L/R
PC RGB
Y,Pb,Pr
10bit AD (ADV7499)
FAN SOS
SOUND SOS
DC POWER
PA SOS
SU SCAN OUT
S.R 64
TA TUNER
MAIN TUNER
SIF
TV-V1
TA6
H6
H51
H2
H1
MSP
PC IN
R,G,B
TV_L/R
MONITOR OUT
AUDIO IN
AV1
AV2
AV3
Y,Y,PB,PR
Y,Y,C
AUDIO INPUT SELECT
VIDEO INPUT SELECT
H AV TERMINAL, AV SWITCH,MSP
DC POWER
H40
SC SCAN DRIVE
CONTROL PULSE
SUSTAIN PULSE
SCAN PULSE
VOLTAGE GENERATOR
SOS6 SOS7
SC20
SC2
SC23
SD SCAN OUT
P POWER SUPPLY
P2
P23
VSUS
15Vd
PROTECTION(SOS)
RECTIFIER
STANDBY VOLTAGE CONTROL
STANDBY VOLTAGE RECTIFIER
+5Vc
STB5V
RUSH/MAIN_ON/OFF
RELAY,PFC CONTROL
PFC_ON/OFF
POWER FACTOR CORRECTOR
RELAY
PROCESS VOLTAGE CONTROL
PROCESS VOLTAGE RECTIFIER
VDA
15Vc
15Vd
F_STB_14V
SUSTAIN VOLTAGE CONTROL
SUSTAIN VOLTAGE RECTIFIER
AC CORD
P9
LINE FILTER
+5V
STBY5V_M
+15V
PS_SOS
P25
F_STB_14V
P10
+15V
P5
15V Vda
P12
P11
D FORMAT CONVERTER PLASMA AI PROCESSOR
D31
D32
SDRAM
VIDEO DATA
D5
LVDS RECEIVER
PICTURE OUTPUT
FORMAT CONVERTER RGB PROCESSOR
PLASMA AI SUB-FIELD PROCESSOR
FLASH CONTROL
FLASH MEMORY
D3
FPGA CONTROL DISCHARGE CONTROL
SUSTAIN CONTROL
DATA DRIVE
IIC
SOS6/SOS7
MICOM
SOS8
SCAN CONTROL
EEPROM
P_ON/OFF
D20
D25
DC/DC CONVERTER
P3.3V
P2.5V
P1.2V
D34
D33
PA DC-DC CONVERTER
PA20
PA40
PA10
PA5
POWER SOS
FAN SOS
+15V
PA31
PA34
FAN
DC/DC CONVERTER
SPEAKER AMP
SOUND SOS
PA2
SPEAKER L
SPEAKER R
SS SUSTAIN DRIVE
SS2
SS3
SS44
SS23
SS21
SS20
SS22
ADDRESS VOLTAGE (VE)
SUSTAIN PULSE
ERASE PULSE
SS_SOS8
SS43
SS44
SS12
SS11
VDA
+15V
VSUS
C6 DATA DRIVER(LEFT)
C60
C5 DATA DRIVER(CENTER)
C50
C51
C52
C4 DATA DRIVER(RIGHT)
C41
C42
C43
C44

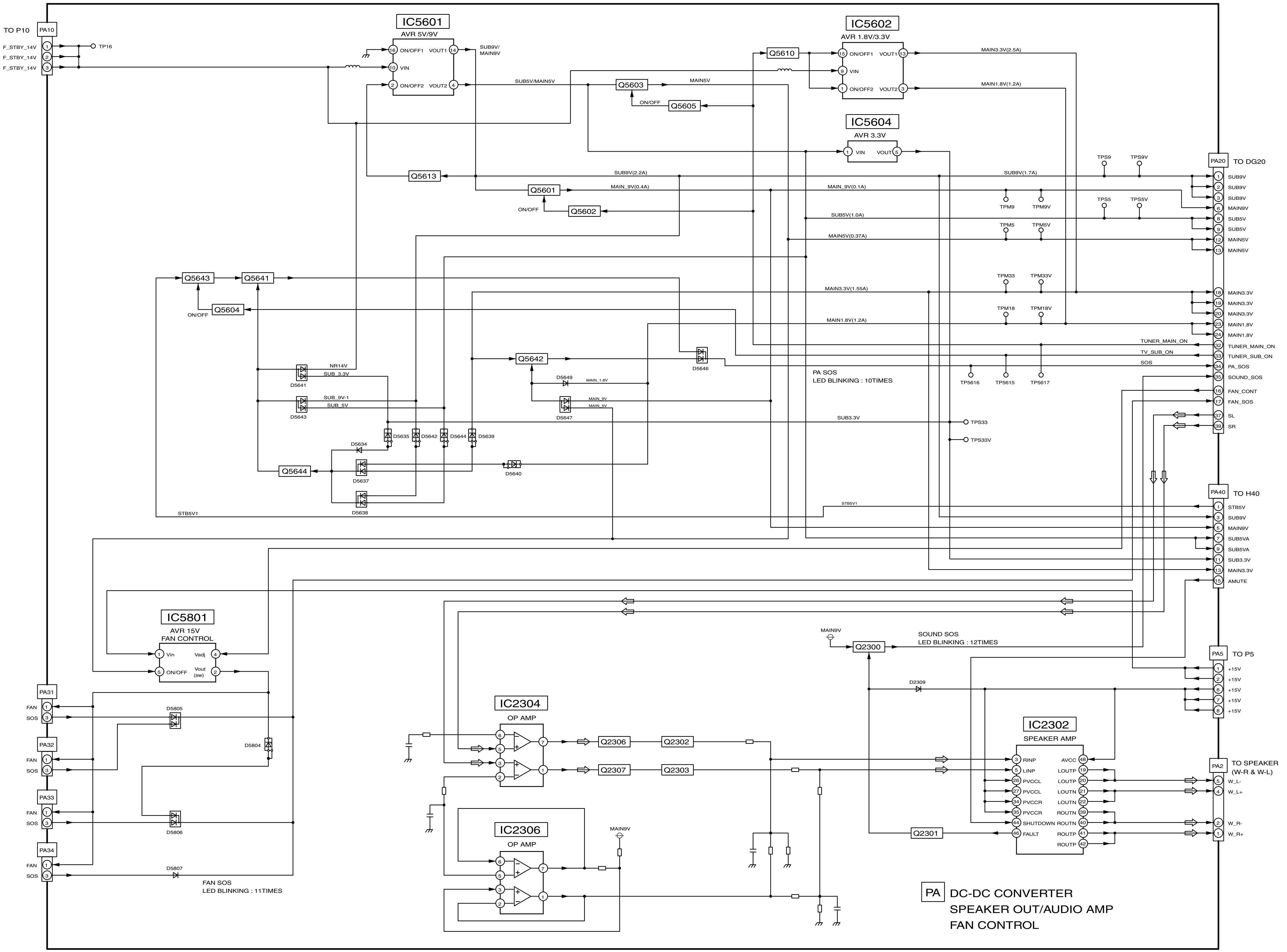
TH-50PV60A
Main Block Diagram

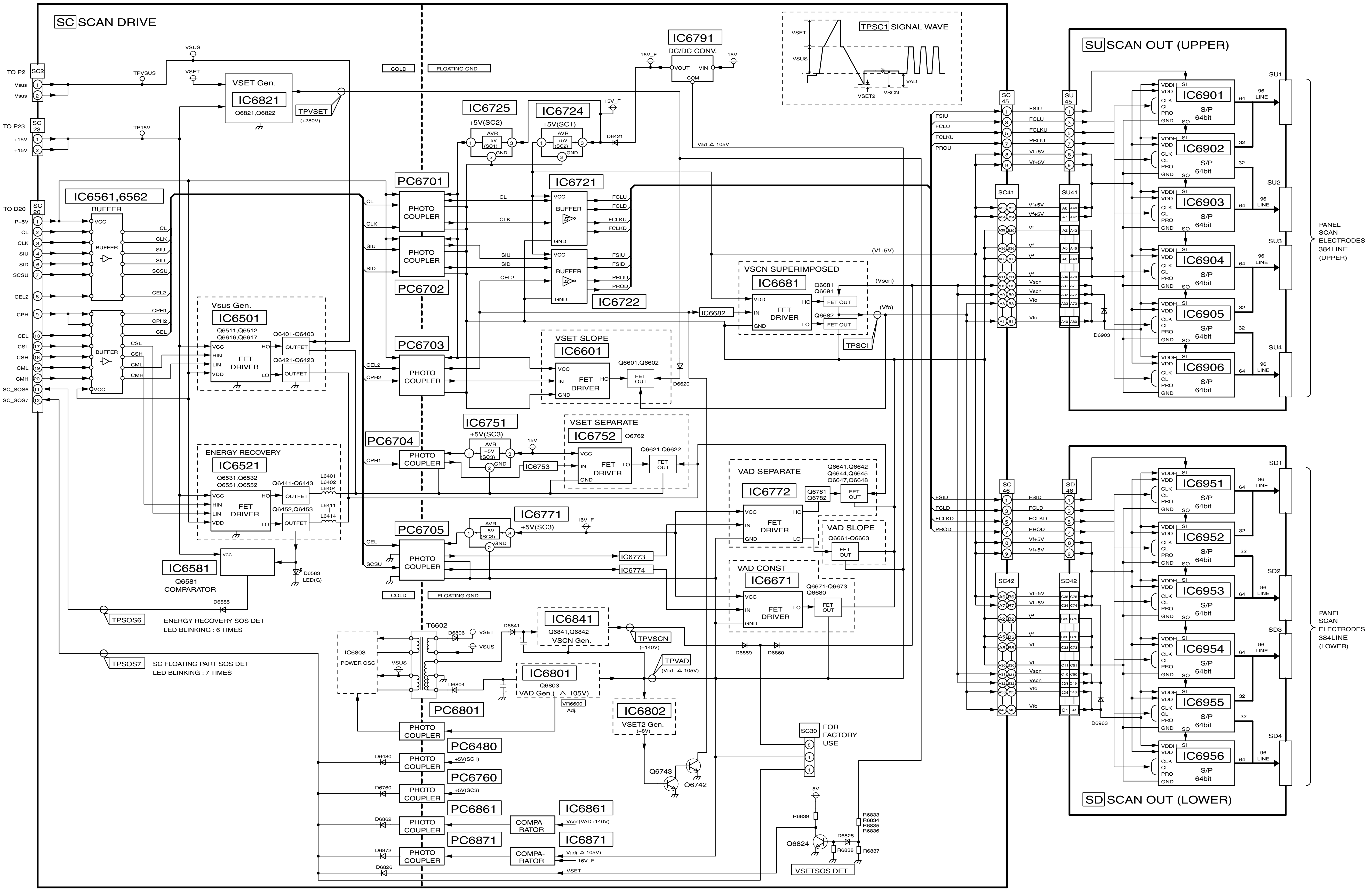
TH-50PV60A
Main Block Diagram


AC IN
100-120V
50/60Hz
P9
LIVE
NEUTRAL
P
POWER SUPPLY
F101
F102
L101
L102
RF101 3A
K101
K102
MC101
RECTIFIER&PFC
AC-
AC-
DC(+)
DC(-)
L103
D3
D2
D1
PFC
D104
F201
PG
HOT
COLD
IC101
POWER FACTOR
CORRECTOR
VCC
IDET
VDET
VFB
VC
VIN-
OVP
OUT
GND
ON/OFF
Q103
Q104
BIAS_G
<Exchange board only>
RUSH ON/OFF
MAIN ON/OFF
MC202
Vsus
POWER SUPPLY
<Exchange board only>
MC201
Vsus
POWER SUPPLY
<Exchange board only>
BIAS
ON/OFF
SL
VDD
OV
VCC
STOP
V+
D251
D255
D253
D254
VR251
VSUS
R253
R254
R255
R258
R259
R260
R261
D252
Vsus 180V
VSUS-OUT
P2
TO SC2
VSUS
GND
P11
TO SS11
VSUS
GND
P23
TO SC23
15Vd
15Vd
P5
TO PA5
15Vs
15Vs
15Vs
15Vc
15Vc
15Vc
MC502
RELAY/
PFC CONTROL
MODULE
<Exchange board only>
RELAY RUSH
RELAY MAIN
BIAS-PFC (VCC-OUT)
PFC-15V
PFC-SUS
ON/OFF PFC
SUS ON/OFF
BIAS ON/OFF
VCC-IN
GND
15V-ON/OFF
BIAS
Q106
PC505
PC506
PFC_ON/OFF
PC503
BIAS_ON/OFF
Q553
RECTIFIER
D501
AC+
AC-
(STB)
PG-STB
F301
Q301
R305
Q302
BIAS
T301
D402
P1
P2
S1
S2
S6
D403
R307
R306
R305
SW
Q401
Vda_ON
Q402
Q403
SW
Q404
Q405
Q406
ZD407
ZD405
ZD406
ZD408
L401
VR401
Vda
IC401
Vda DET
P12
TO SS12
VDA
VDA
15Vd
SW_MAIN
STB_PS
MAIN SW
MC301
Vda/STB POWER CONTROL MODULE
<Exchange board only>
Fsw-ON
ON/OFF
GH
SH
GL
I+
BIAS
V+
VCC
OV
VR351
Vda
D503
D502
Q501
Q502
PG
D505
D508
L502
T501
B1
S2A
S2B
D551
BIAS GND
B2
P2
P1
S1B
S1A
F501
D506
IC501
D511
B3
B4
PG_STB
D355
B3
S4A
S4B
D352
S5
Q351
15V_ON
Q353
ZD351
Q352
F15V_ON
Q354
ZD353
5V_ON
Q552
D555
Q551
STB-ON/OFF
D554
D556
P25
TO D25
+5VC
+5VC
STB5V
15Vc
15Vc
ALL_OFF
PS_SOS
H=SOS
L=OK
PANEL_ON
F_STB_ON
Vda_Low(Vda_DET)
P10
TO PA10
F_STB_15V
F_STB_15V
F_STB_15V
MC601
POWER CONTROL
MODULE
<Exchange board only>
AC_L
AC_N
DISCHG
CONTROL
VBias
GND
GND_S-
GND_OVP
Vo_S+
Vo_WP
AC DET
AC_DET
MC701
POWER MCU MODULE
<exchange board only>
POWER MCU
STB_IN (VDD)
15V_IN
BIAS_ON
PFC_ON
Vda_ON
F15V_ON
15V_ON
SUS_ON
SUS_STOP
STB_ON
STB_ON
STB_OUT
5VC_ON
Vda_OUT
SW_MAIN
5VC_OUT
15V_OUT
SUS_OUT
ALL_OFF
F_STB_ON
PANEL_ON
PS_SOS
Vda_LOW
P07
AD1
P03
P14
P06
P12
P30
P05
P02
AD0
P04
AD2
P11
AD4
P20
P10
P13
AD5
P01
P21
P22
P00
P31

TH-50PV60A
P-Board Block Diagram

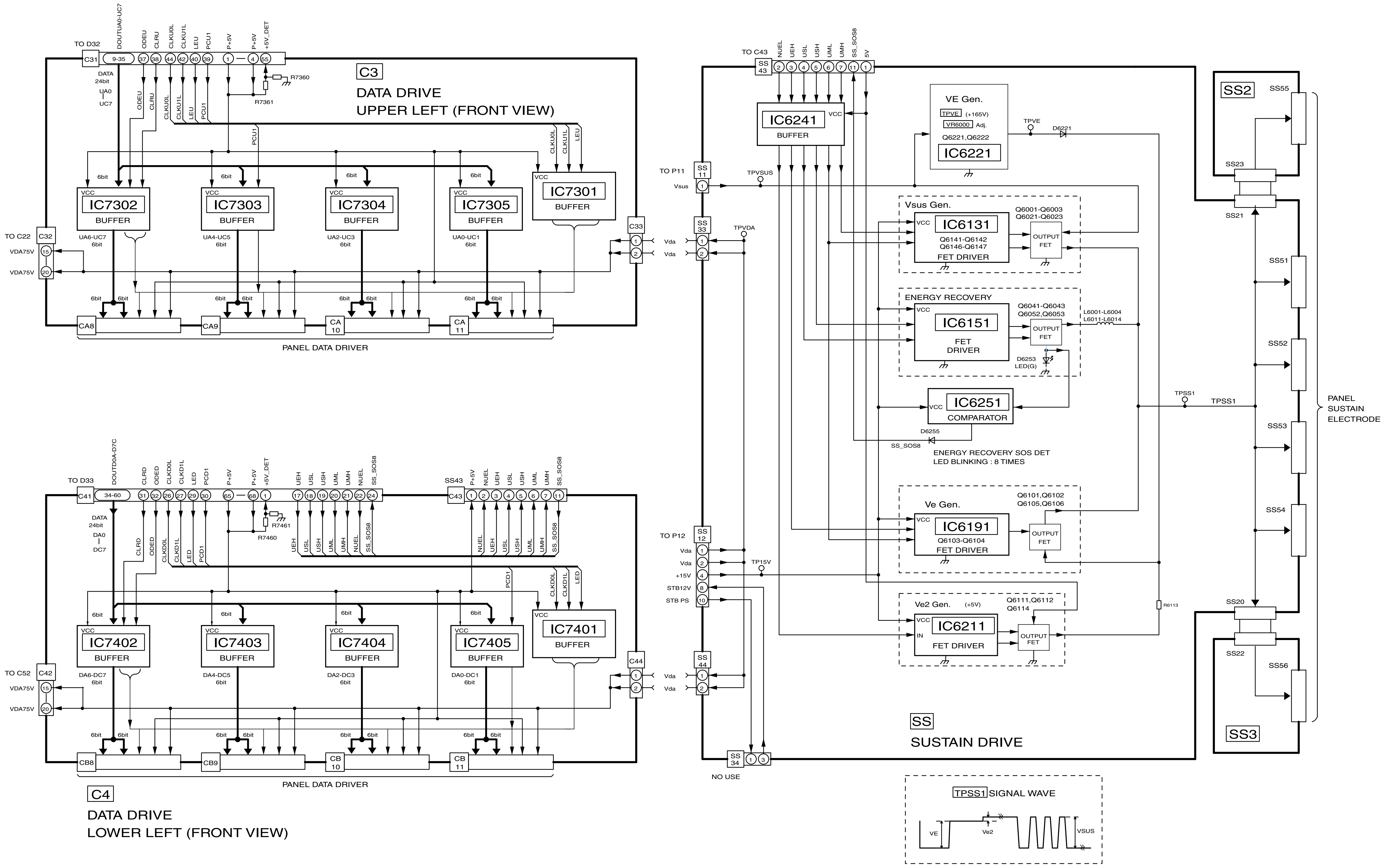
TH-50PV60A
P-Board Block Diagram


TO P10
PA10
F_STBY_14V
F_STBY_14V
F_STBY_14V
TP16
IC5601
AVR 5V/9V
ON/OFF1
VOUT1
VIN
ON/OFF2
VOUT2
SUB9V/
MAIN9V
SUB5V/MAIN5V
Q5603
MAIN5V
ON/OFF
Q5605
IC5602
AVR 1.8V/3.3V
Q5610
ON/OFF1
VOUT1
VIN
ON/OFF2
VOUT2
MAIN3.3V(2.5A)
MAIN1.8V(1.2A)
IC5604
AVR 3.3V
VIN
VOUT
Q5613
SUB9V(2.2A)
SUB9V(1.7A)
Q5601
MAIN_9V(0.4A)
MAIN_9V(0.1A)
ON/OFF
Q5602
SUB5V(1.0A)
MAIN5V(0.37A)
TPS9
TPS9V
TPM9
TPM9V
TPS5
TPS5V
TPM5
TPM5V
TPM33
TPM33V
TPM18
TPM18V
PA20
TO DG20
SUB9V
SUB9V
SUB9V
MAIN9V
SUB5V
SUB5V
MAIN5V
MAIN5V
MAIN3.3V
MAIN3.3V
MAIN3.3V
MAIN1.8V
MAIN1.8V
TUNER_MAIN_ON
TUNER_SUB_ON
PA_SOS
SOUND_SOS
FAN_CONT
FAN_SOS
SL
SR
Q5643
Q5641
ON/OFF
Q5604
MAIN3.3V(1.55A)
MAIN1.8V(1.2A)
TUNER_MAIN_ON
TV_SUB_ON
SOS
Q5642
D5646
PA SOS
LED BLINKING : 10TIMES
TP5616
TP5615
TP5617
NR14V
SUB_3.3V
D5641
D5649
MAIN_1.8V
SUB_9V-1
SUB_5V
D5643
D5647
MAIN_9V
MAIN_5V
SUB3.3V
TPS33
TPS33V
D5635
D5642
D5644
D5639
D5634
Q5644
D5637
D5640
D5638
STB5V1
STB5V1
PA40
TO H40
STB5V
SUB9V
MAIN9V
SUB5VA
SUB5VA
SUB3.3V
MAIN3.3V
AMUTE
IC5801
AVR 15V
FAN CONTROL
Vin
Vadj
ON/OFF
Vout
(sw)
MAIN9V
Q2300
SOUND SOS
LED BLINKING : 12TIMES
PA5
TO P5
+15V
+15V
+15V
+15V
+15V
D2309
PA31
FAN
SOS
D5805
PA32
FAN
SOS
D5804
PA33
FAN
SOS
D5806
PA34
FAN
SOS
D5807
FAN SOS
LED BLINKING : 11TIMES
IC2304
OP AMP
Q2306
Q2302
Q2307
Q2303
IC2306
OP AMP
MAIN9V
IC2302
SPEAKER AMP
RINP
LINP
PVCCL
PVCCL
PVCCR
PVCCR
SHUTDOWN
FAULT
AVCC
LOUTP
LOUTP
LOUTN
LOUTN
ROUTN
ROUTN
ROUTP
ROUTP
Q2301
PA2
TO SPEAKER
(W-R & W-L)
W_L-
W_L+
W_R-
W_R+
PA
DC-DC CONVERTER
SPEAKER OUT/AUDIO AMP
FAN CONTROL


SC SCAN DRIVE
TO P2
SC2
Vsus
Vsus
TO P23
SC23
+15V
+15V
TO D20
SC20
P+5V
CL
CLK
SIU
SID
SCSU
CEL2
CPH
CEL
CSL
CSH
CML
CMH
SC_SOS6
SC_SOS7
VSUS
TPVSUS
VSET
TP15V
VSET Gen.
IC6821
Q6821,Q6822
TPVSET
(+280V)
COLD
FLOATING GND
IC6791
DC/DC CONV.
16V_F
15V
VOUT
VIN
COM
TPSC1 SIGNAL WAVE
VSET
VSUS
VSET2
VSCN
VAD
IC6561,6562
BUFFER
VCC
BUFFER
CPH1
CPH2
CSL
CSH
CML
CMH
IC6725
+5V(SC2)
AVR
+5V (SC1)
GND
IC6724
+5V(SC1)
+5V (SC2)
15V_F
D6421
Vad △ 105V
PC6701
PHOTO COUPLER
PC6702
IC6721
BUFFER
FCLU
FCLD
FCLKU
FCLKD
FSIU
FSID
PROU
PROD
IC6722
CEL2
Vsus Gen.
IC6501
Q6511,Q6512
Q6616,Q6617
Q6401-Q6403
Q6421-Q6423
HIN
LIN
VDD
HO
LO
FET DRIVEB
OUTFET
PC6703
CPH2
VSET SLOPE
IC6601
Q6601,Q6602
FET DRIVER
FET OUT
D6620
VSCN SUPERIMPOSED
IC6681
Q6681
Q6691
Q6682
IC6682
TPSCI
(Vf+5V)
(Vscn)
(Vfo)
IC6751
+5V(SC3)
PC6704
CPH1
IC6753
VSET SEPARATE
IC6752
Q6762
Q6621,Q6622
ENERGY RECOVERY
IC6521
Q6531,Q6532
Q6551,Q6552
Q6441-Q6443
Q6452,Q6453
L6401
L6402
L6404
L6411
L6414
VAD SEPARATE
Q6641,Q6642
Q6644,Q6645
Q6647,Q6648
IC6772
Q6781
Q6782
IC6771
16V_F
PC6705
SCSU
IC6773
IC6774
VAD SLOPE
Q6661-Q6663
IC6581
Q6581
COMPARATOR
D6583
LED(G)
D6585
TPSOS6
ENERGY RECOVERY SOS DET
LED BLINKING : 6 TIMES
TPSOS7
SC FLOATING PART SOS DET
LED BLINKING : 7 TIMES
VAD CONST
IC6671
Q6671-Q6673
Q6680
T6602
D6806
D6841
D6804
IC6803
POWER OSC
IC6841
Q6841,Q6842
VSCN Gen.
TPVSCN
(+140V)
D6859
D6860
IC6801
Q6803
VAD Gen.(△ 105V)
VR6600
Adj.
TPVAD
(Vad △ 105V)
PC6801
IC6802
VSET2 Gen.
(+8V)
SC30
FOR FACTORY USE
Q6743
Q6742
PC6480
D6480
+5V(SC1)
PC6760
D6760
+5V(SC3)
PC6861
D6862
IC6861
COMPA-RATOR
Vscn(VAD+140V)
PC6871
D6872
IC6871
Vad(△ 105V)
D6826
5V
R6839
R6833
R6834
R6835
R6836
Q6824
D6825
R6838
R6837
VSETSOS DET
SC45
SU45
SC41
SU41
Vf+5V
Vf
Vscn
Vfo
D6903
SC46
SD46
SC42
SD42
D6963
SU SCAN OUT (UPPER)
IC6901
IC6902
IC6903
IC6904
IC6905
IC6906
VDDH
SI
SO
S/P 64bit
96 LINE
64
32
SU1
SU2
SU3
SU4
PANEL SCAN ELECTRODES 384LINE (UPPER)
SD SCAN OUT (LOWER)
IC6951
IC6952
IC6953
IC6954
IC6955
IC6956
SD1
SD2
SD3
SD4
PANEL SCAN ELECTRODES 384LINE (LOWER)

TH-50PV60A
SC, SU and SD-Board Block Diagram

TH-50PV60A
SC, SU and SD-Board Block Diagram


C3
DATA DRIVE
UPPER LEFT (FRONT VIEW)
TO D32
C31
DATA 24bit
UA0 | UC7
DOUTUA0-UC7
ODEU
CLRU
CLKU0L
CLKU1L
LEU
PCU1
P+5V
+5V_DET
R7360
R7361
IC7302 BUFFER
IC7303 BUFFER
IC7304 BUFFER
IC7305 BUFFER
IC7301 BUFFER
VCC
6bit
UA6-UC7 6bit
UA4-UC5 6bit
UA2-UC3 6bit
UA0-UC1 6bit
TO C22
C32
VDA75V
C33
Vda
CA8
CA9
CA 10
CA 11
PANEL DATA DRIVER
C4
DATA DRIVE
LOWER LEFT (FRONT VIEW)
TO D33
C41
DATA 24bit
DA0 | DC7
DOUTD0A-D7C
CLRD
ODED
CLKD0L
CLKD1L
LED
PCD1
R7460
R7461
UEH
USL
USH
UML
UMH
NUEL
SS_SOS8
SS43
C43
IC7402 BUFFER
IC7403 BUFFER
IC7404 BUFFER
IC7405 BUFFER
IC7401 BUFFER
DA6-DC7 6bit
DA4-DC5 6bit
DA2-DC3 6bit
DA0-DC1 6bit
TO C52
C42
C44
CB8
CB9
CB 10
CB 11
PANEL DATA DRIVER
TO C43
SS 43
5V
IC6241 BUFFER
VE Gen.
TPVE (+165V)
VR6000 Adj.
Q6221,Q6222
IC6221
TPVE
D6221
TO P11
SS 11
Vsus
TPVSUS
SS 33
TPVDA
Vsus Gen.
IC6131
Q6001-Q6003
Q6021-Q6023
Q6141-Q6142
Q6146-Q6147
FET DRIVER
OUTPUT FET
ENERGY RECOVERY
IC6151 FET DRIVER
Q6041-Q6043
Q6052,Q6053
L6001-L6004
L6011-L6014
D6253 LED(G)
IC6251 COMPARATOR
D6255
SS_SOS8
ENERGY RECOVERY SOS DET
LED BLINKING : 8 TIMES
TPSS1
Ve Gen.
IC6191
Q6101,Q6102
Q6105,Q6106
Q6103-Q6104
FET DRIVER
TO P12
SS 12
+15V
STB12V
STB PS
TP15V
Ve2 Gen.
(+5V)
IC6211
Q6111,Q6112
Q6114
IN
FET DRIVER
R6113
SS 44
SS 34
NO USE
SS
SUSTAIN DRIVE
SS2
SS55
SS23
SS21
SS51
SS52
SS53
SS54
SS20
SS22
SS56
SS3
PANEL SUSTAIN ELECTRODE
TPSS1 SIGNAL WAVE
VE
Ve2
VSUS

6

5

4

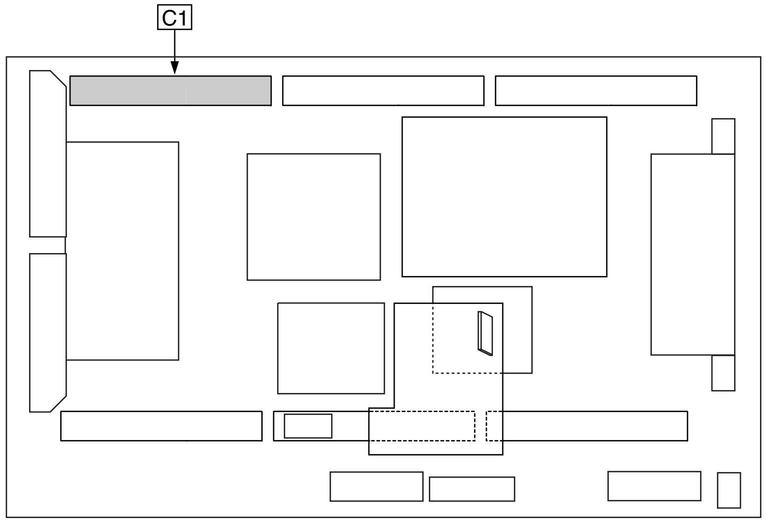
3

2

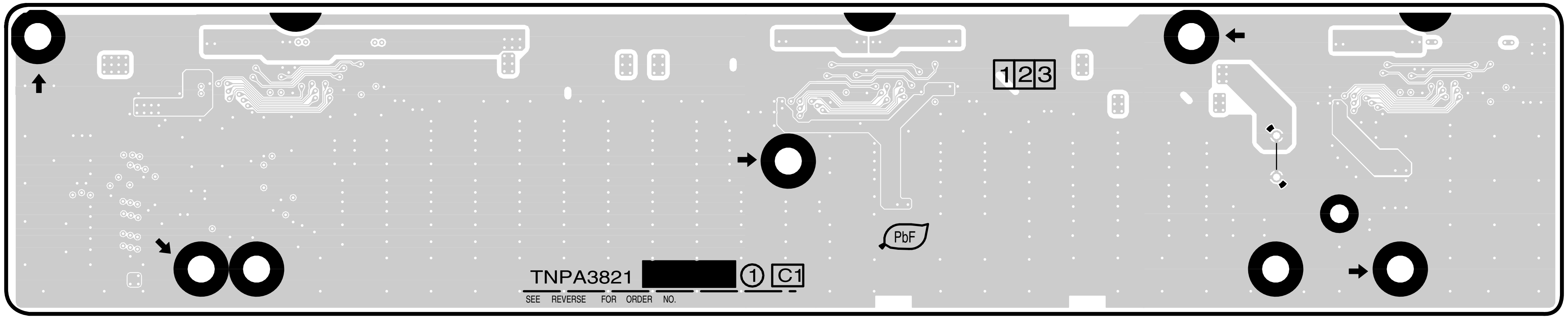
1

Parts Location

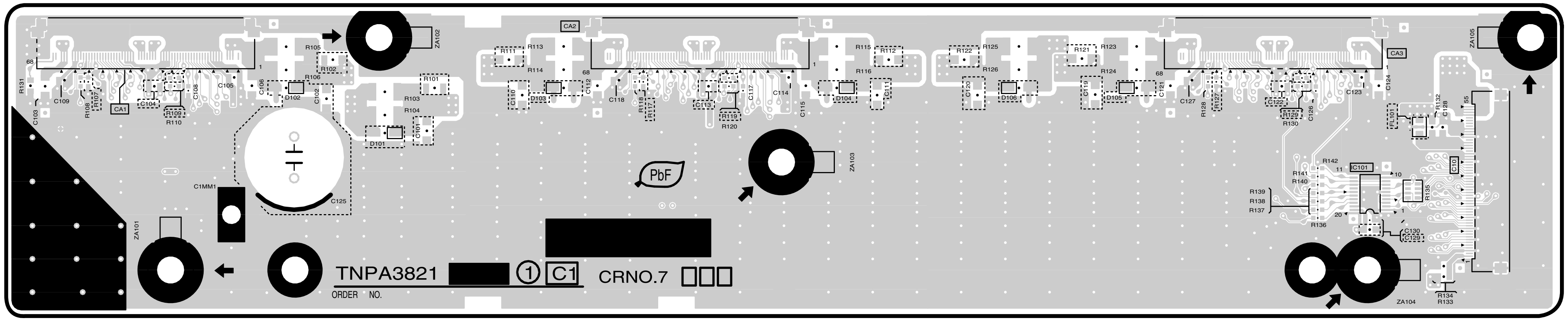
C1-BOARD	
IC	
IC7101	G-1



C1-BOARD (FOIL SIDE)
TNPA3821


123
PbF
TNPA3821
① C1
SEE REVERSE FOR ORDER NO.

C1-BOARD (COMPONENT SIDE)
TNPA3821


CA1
CA2
CA3
ZA101
ZA102
ZA103
ZA104
ZA105
C1MM1
C125
IC101
PbF
TNPA3821
① C1
CRNO.7
ORDER NO.
R101
R102
R103
R104
R105
R106
R131
R132
R133
R134
R135
R136
R137
R138
R139
R140
R141
R142
D101
D102
D103
D104
D105
D106
C109
C118
C123
C127
C130

A B C D E F G H I

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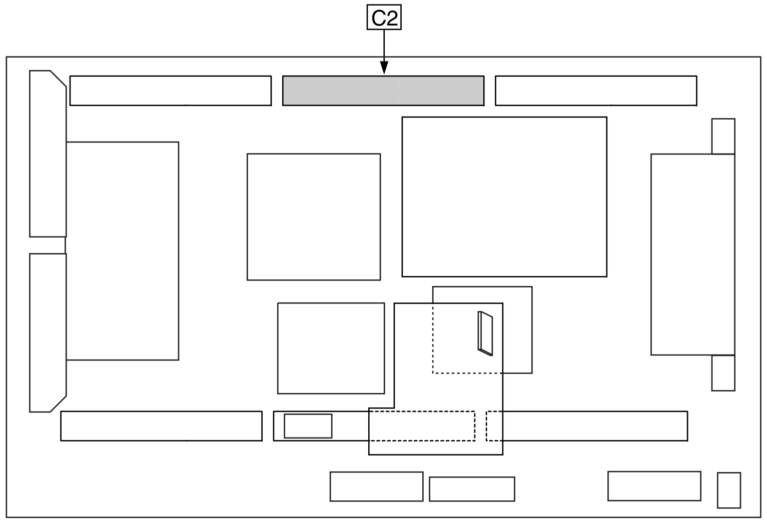
3

2

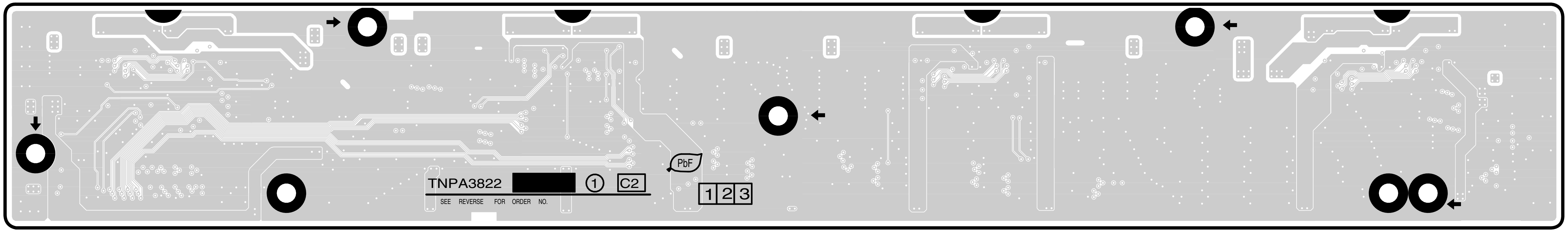
1

Parts Location

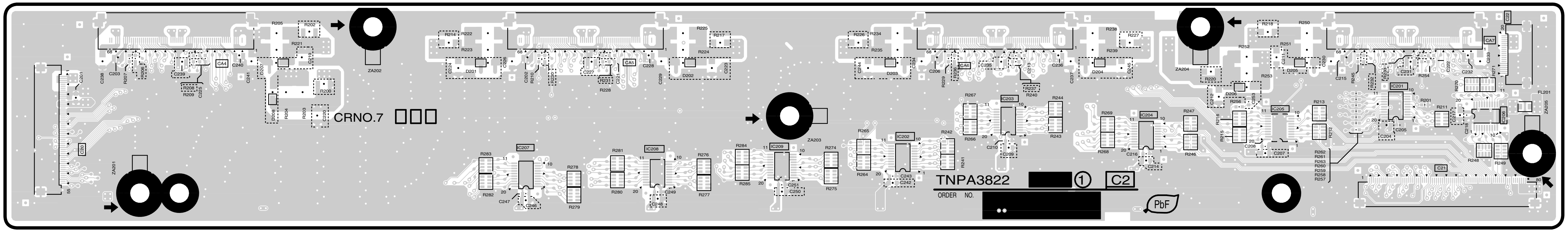
C2-BOARD	
IC	
IC7201	H-1
IC7202	F-1
IC7203	F-2
IC7204	G-2
IC7205	H-2
IC7206	I-2
IC7207	D-1
IC7208	D-1
IC7209	E-1



C2-BOARD (FOIL SIDE)
TNPA3822


TNPA3822
①
C2
SEE REVERSE FOR ORDER NO.
PbF
1 2 3

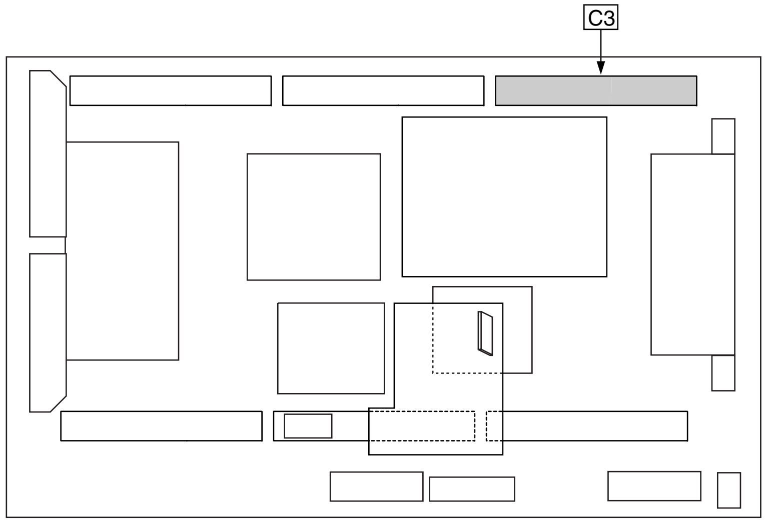
C2-BOARD (COMPONENT SIDE)
TNPA3822


CRNO.7
TNPA3822
①
C2
ORDER NO.
PbF
ZA202
ZA203
ZA204
ZA201
IC207
IC208
IC209
IC202
IC203
IC204
IC205
IC201
CA4
CA5
CA6
CA7
FL201

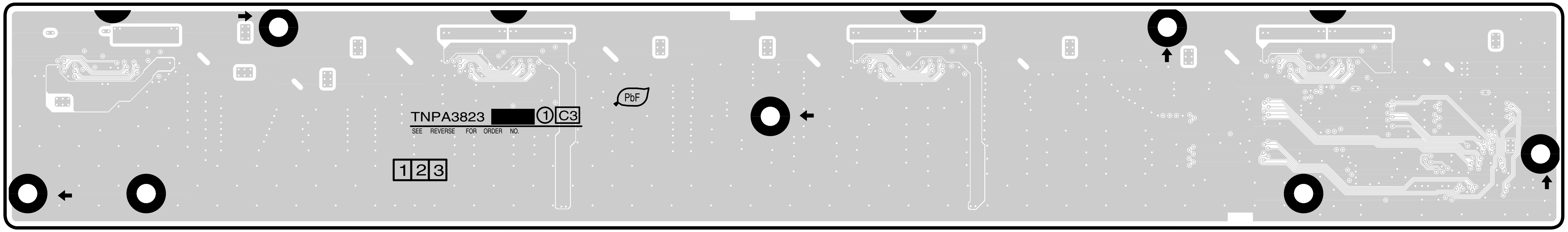
TH-50PV60A
C2-BOARD TNPA3822

A B C D E F G H I

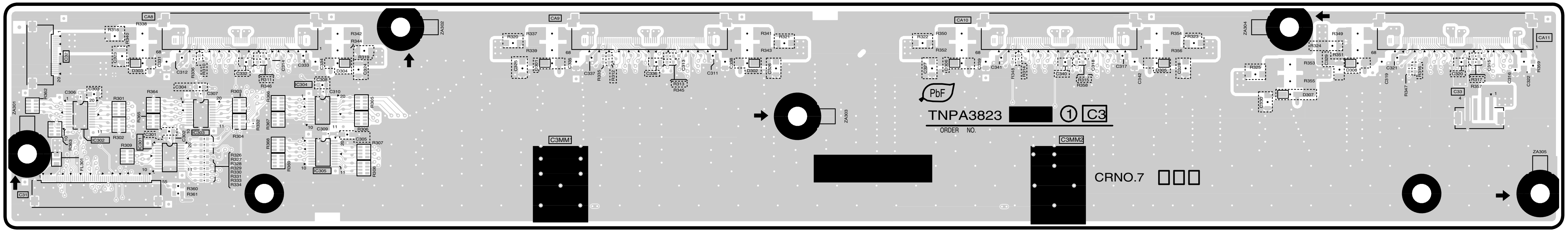
C3-BOARD	
IC	
IC7301	B-1
IC7302	A-2
IC7303	B-2
IC7304	B-2
IC7305	B-1



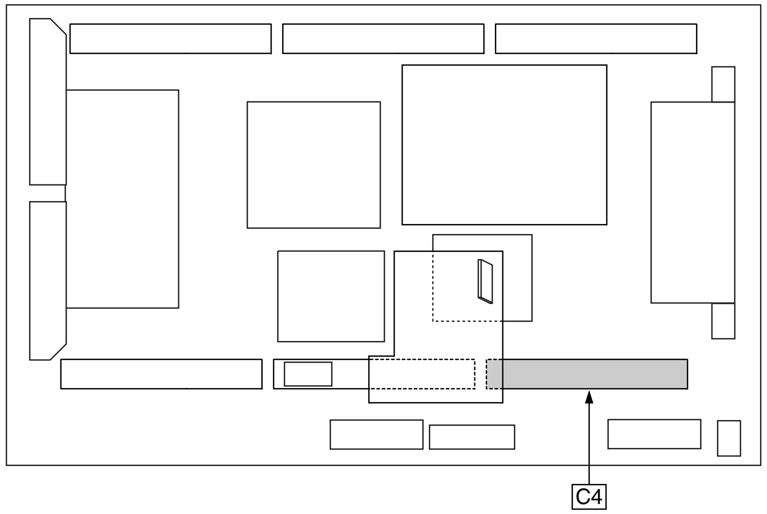
C3-BOARD (FOIL SIDE)
TNPA3823


TNPA3823 ① C3
SEE REVERSE FOR ORDER NO.
1 2 3
PbF

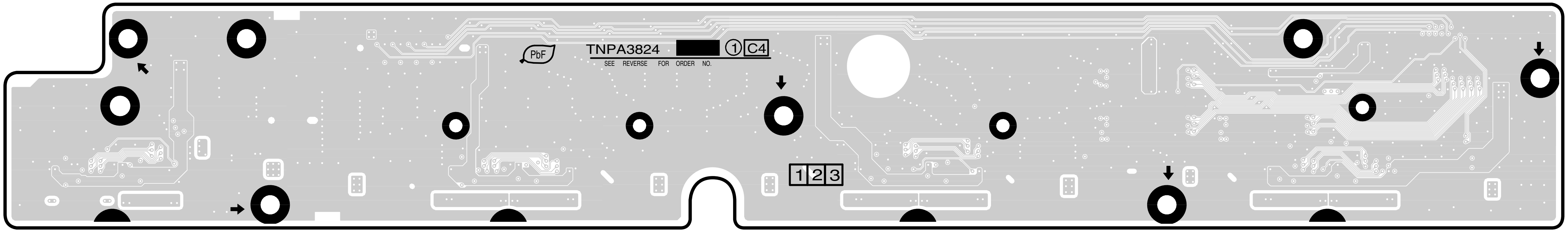
C3-BOARD (COMPONENT SIDE)
TNPA3823


CA8
CA9
CA10
CA11
C3MM1
C3MM2
PbF
TNPA3823 ① C3
ORDER NO.
CRNO.7

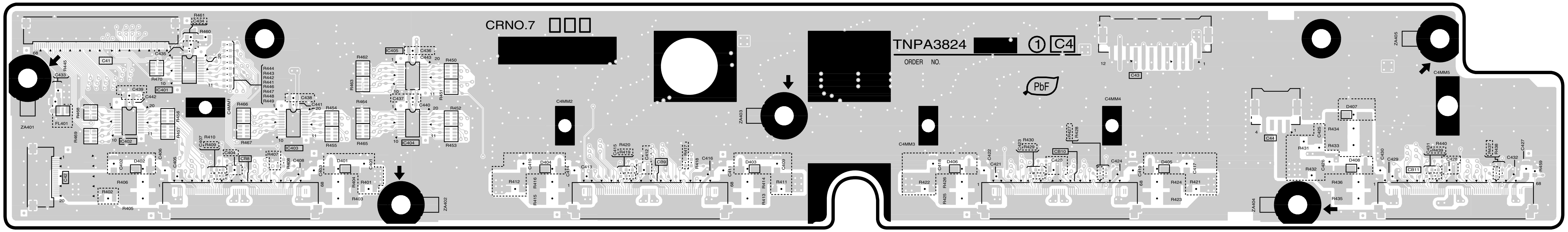
C4-BOARD	
IC	
IC7401	B-2
IC7402	A-2
IC7403	B-2
IC7404	C-2
IC7405	C-2



C4-BOARD (FOIL SIDE)
TNPA3824


PbF
TNPA3824
①
C4
SEE REVERSE FOR ORDER NO.
1
2
3

C4-BOARD (COMPONENT SIDE)
TNPA3824


CRNO.7
TNPA3824
①
C4
ORDER NO.
PbF
ZA401
ZA402
ZA403
ZA404
ZA405
C4MM1
C4MM2
C4MM3
C4MM4
C4MM5
FL401
IC401
IC402
IC403
IC404
IC405
C43
C44
CB11
D401
D403
D404
D405
D406
D407
D408

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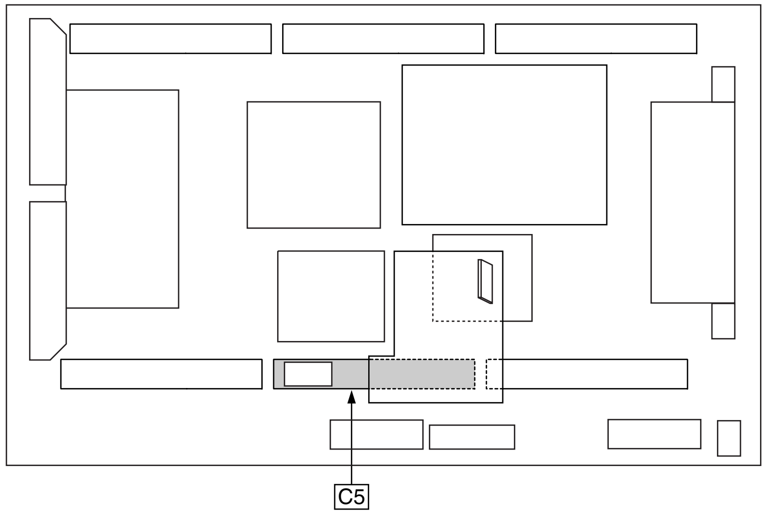
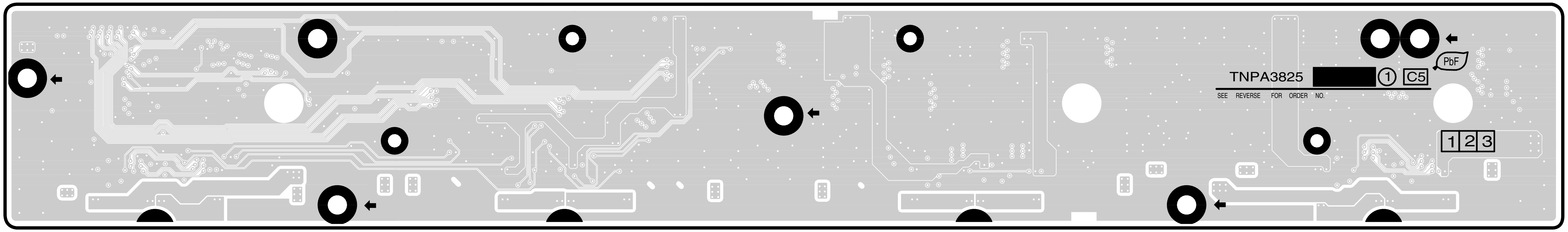
C5-BOARD

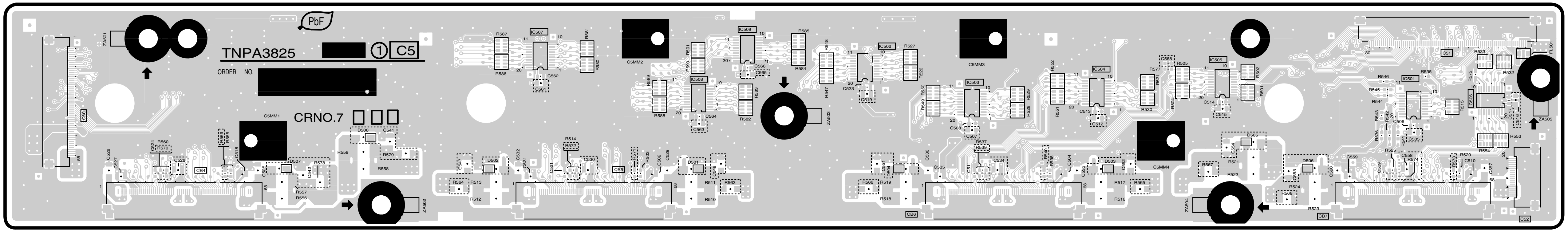
IC	
IC7501	H-1
IC7502	E-2
IC7503	F-2
IC7504	G-2
IC7505	G-2
IC7506	I-2
IC7507	D-2
IC7508	D-2
IC7509	E-2



C5-BOARD (FOIL SIDE)
TNPA3825


TNPA3825
① C5
PbF
SEE REVERSE FOR ORDER NO.
1 2 3

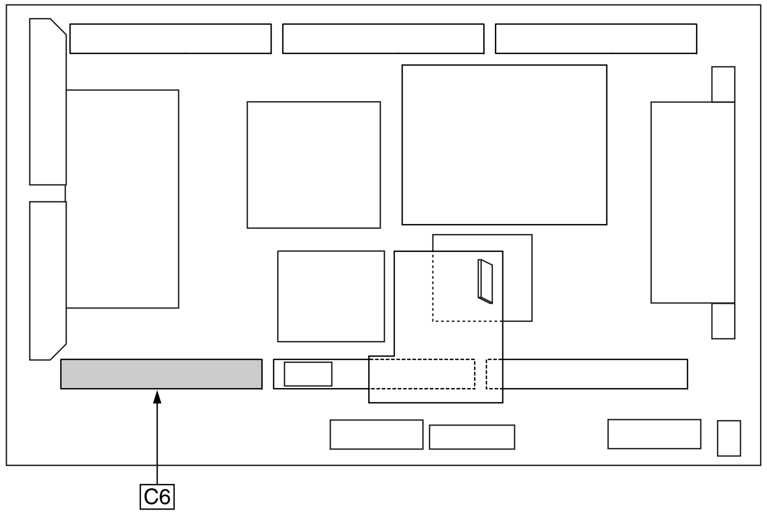
C5-BOARD (COMPONENT SIDE)
TNPA3825


TNPA3825
① C5
PbF
ORDER NO.
CRNO.7
IC507
IC509
IC502
IC503
IC504
IC505
IC501
IC508
C5MM1
C5MM2
C5MM3
C5MM4
ZA501
ZA502
ZA503
ZA504
ZA505

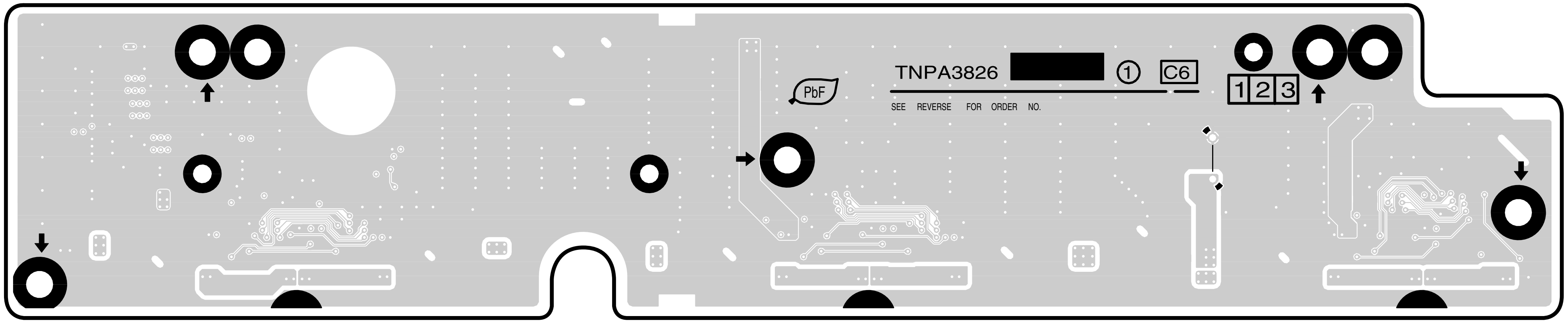
A B C D E F G H I

Parts Location

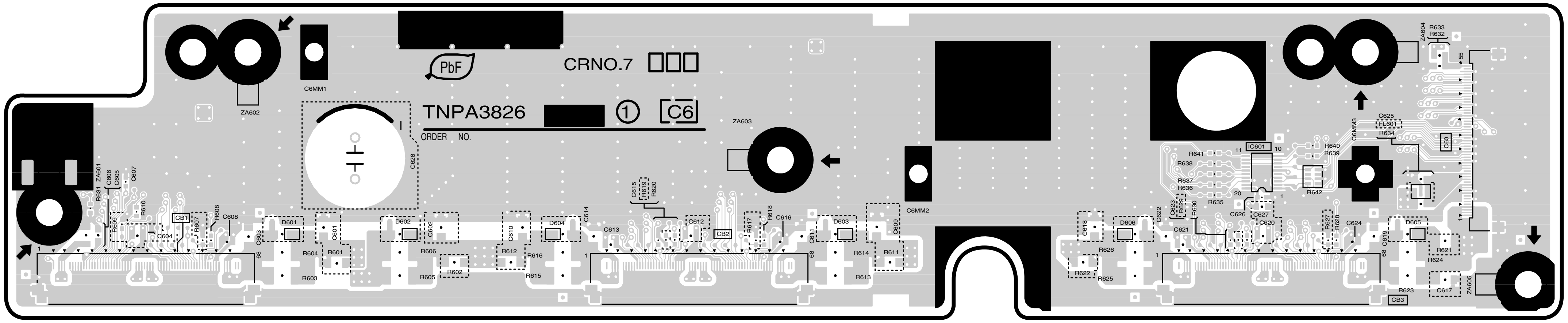
C6-BOARD	
IC	
IC7601	G-2



C6-BOARD (FOIL SIDE)
TNPA3826

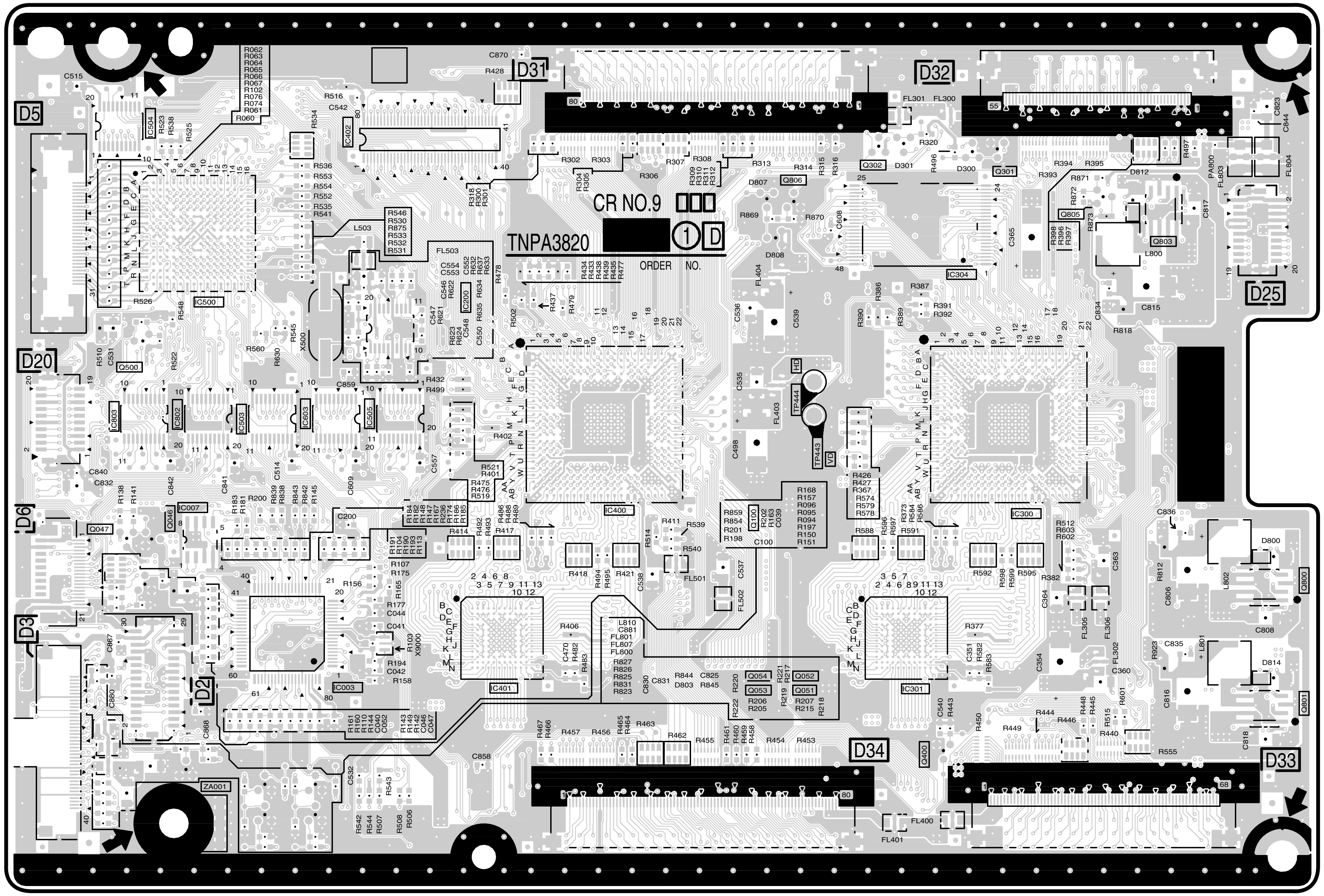

PbF
TNPA3826
①
C6
SEE REVERSE FOR ORDER NO.
1
2
3

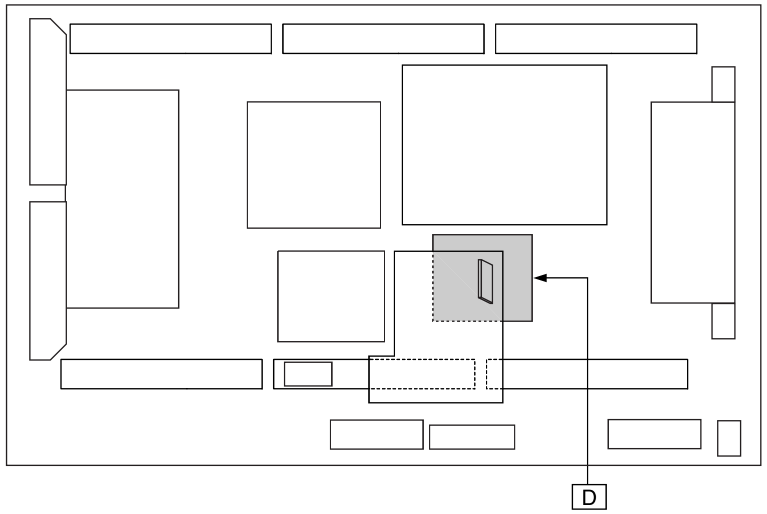
C6-BOARD (COMPONENT SIDE)
TNPA3826


PbF
CRNO.7
TNPA3826
①
C6
ORDER NO.
C6MM1
ZA602
ZA603
C6MM2
C6MM3
IC601
ZA601
ZA604
ZA605
CB1
CB2
CB3
D601
D602
D603
D604
D605
D606
R601
R602
R603
R604
R605
R606
R611
R612
R613
R614
R615
R616
R621
R622
R623
R624
R625
R626
R632
R633
R634
R635
R636
R637
R638
R639
R640
R641
R642
C604
C608
C612
C613
C614
C616
C617
C620
C621
C624
C625
C626
C627
C628

TH-50PV60A
C6-BOARD TNPA3826

D-BOARD (COMPONENT SIDE)
TZTNP01BETB

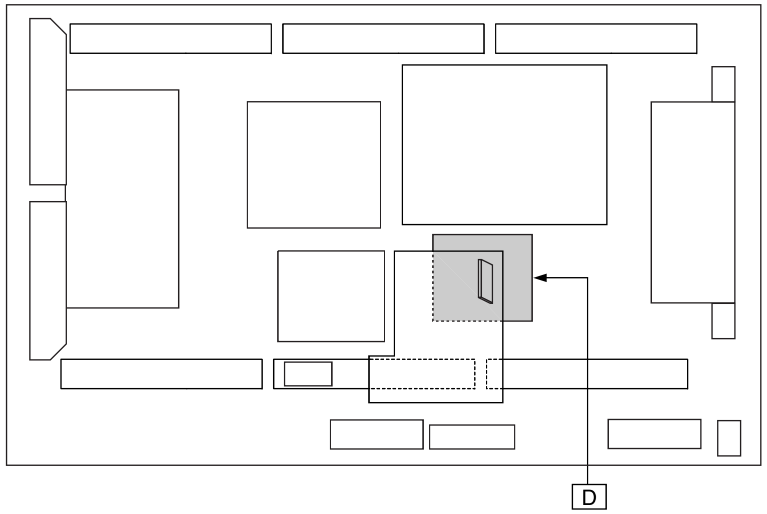

D5
D20
D6
D3
D2
D31
D32
D25
D34
D33
CR NO.9
TNPA3820
ORDER NO.
① D
IC500
IC200
IC400
IC401
IC003
IC300
IC301
IC304
IC007
ZA001
TP444
TP443
Q500
Q047
Q046
Q054
Q052
Q053
Q051
Q302
Q806
Q301
Q805
Q803
Q800
Q801
Q400
Q100
80
55
68



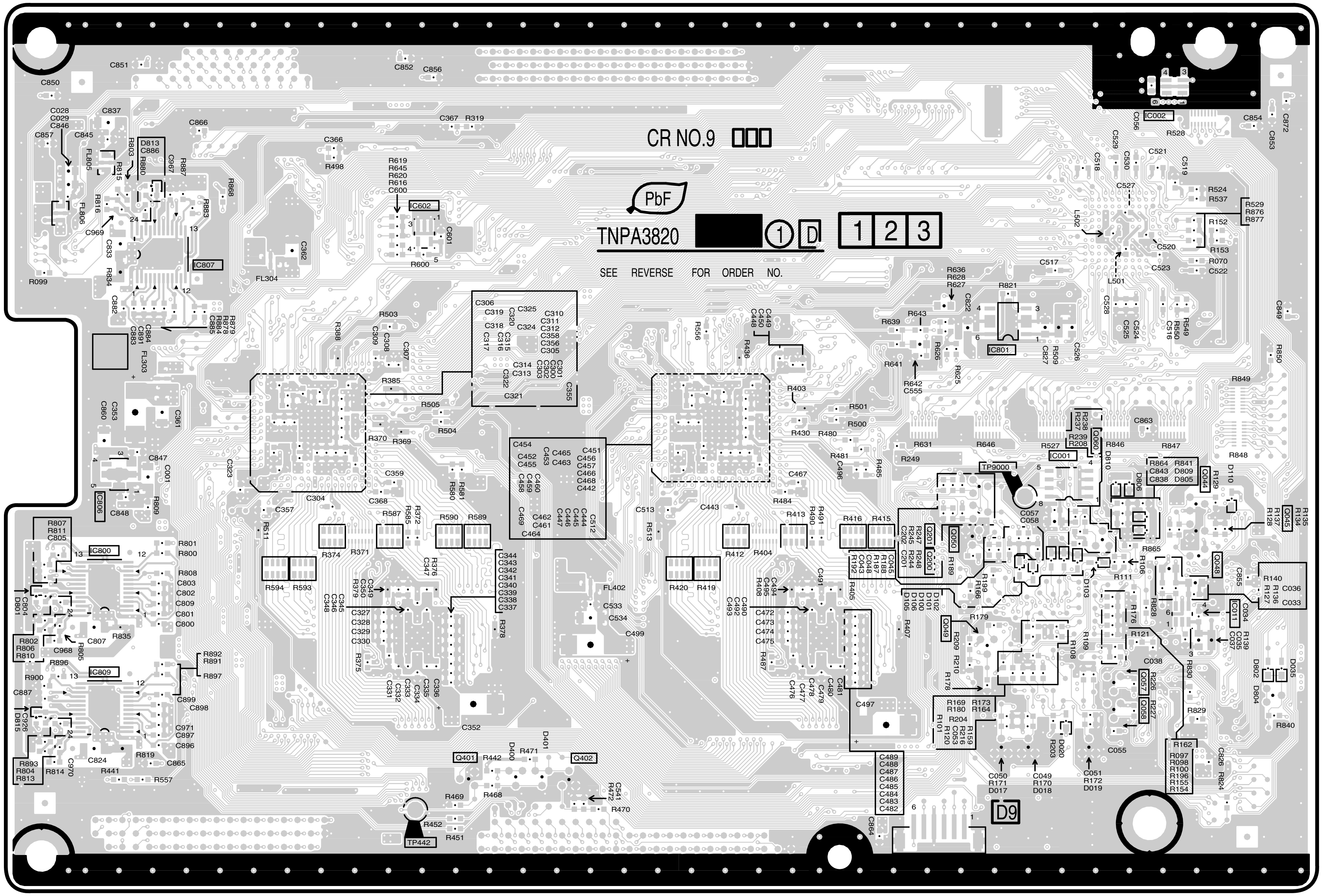
Parts Location

D-BOARD(COMPONENT SIDE)

IC		TRANSISTOR	
IC9003	B-2	Q9046	B-3
IC9007	B-3	Q9047	A-3
IC9200	C-4	Q9051	E-2
IC9300	F-3	Q9052	E-2
IC9301	E-2	Q9053	D-2
IC9304	E-4	Q9054	D-2
IC9400	D-3	Q9100	D-3
IC9401	C-2	Q9301	E-4
IC9402	B-4	Q9302	E-4
IC9500	B-4	**TP**	
IC9503	B-3	TP443	E-3
IC9504	B-5	TP444	E-3
IC9505	C-3		
IC9603	B-3		
IC9802	B-3		
IC9803	A-3		



D-BOARD (FOIL SIDE)
TZTNP01BETB


CR NO.9
PbF
TNPA3820
1
D
1 2 3
SEE REVERSE FOR ORDER NO.
D9
TP442
TP9000
6
5
4
3
2
1
A
B
C
D
E
F
G
H
I

Parts Location

D-BOARD(FOIL SIDE)			
IC		Q9200	E-3
		Q9201	E-3
IC9001	F-3	Q9400	E-2
IC9002	F-5	Q9401	C-2
IC9011	G-2	Q9402	D-2
IC9602	C-4	Q9500	A-3
IC9800	A-3	Q9800	G-2
IC9801	E-4	Q9801	G-2
IC9806	A-3	Q9803	F-4
IC9807	B-4	Q9805	F-4
IC9809	A-2	Q9806	E-4
TRANSISTOR		**TP**	
Q9044	F-3	TP442	C-1
Q9045	G-3	TP9000	E-3
Q9048	F-3		
Q9049	E-2		
Q9050	E-3		
Q9057	F-2		
Q9058	F-2		
Q9060	F-3		

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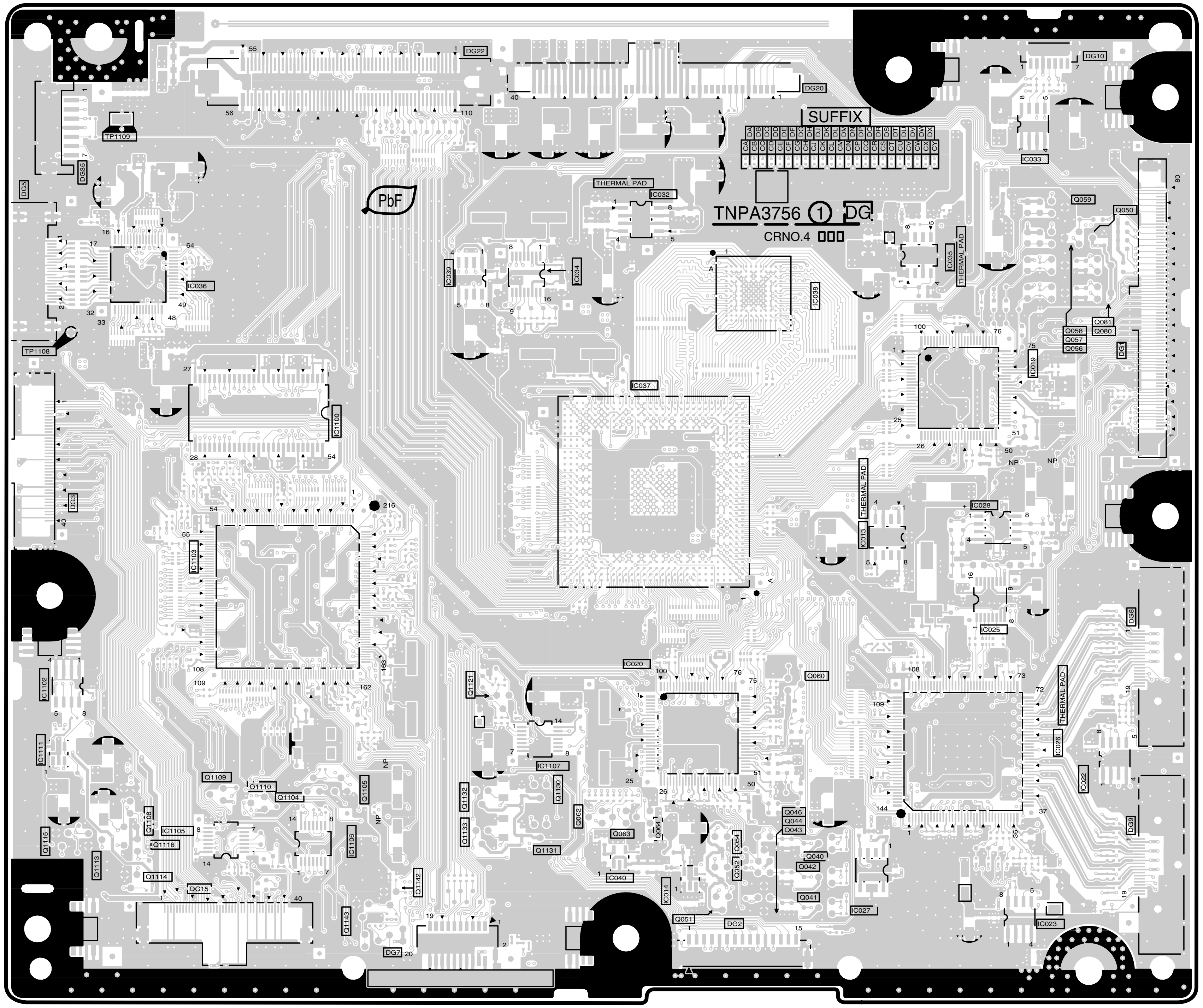
DG-BOARD (COMPONENT SIDE)
TNPA3756CP


TNPA3756 ① DG
CRNO.4
SUFFIX
PbF
THERMAL PAD
IC4032
IC4036
IC4038
IC4037
IC1100
IC1103
IC1102
IC1111
IC4020
IC4019
IC4013
IC4028
IC4025
IC4026
IC4022
IC4023
IC4027
IC4014
IC4033
IC4035
IC4034
IC4039
IC1105
IC1106
IC1107
TP1108
TP1109
Q1109
Q1110
Q1104
Q1113
Q1114
Q1115
Q1116
Q1108
Q1121
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Q1133
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Q1143
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Q4050
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Q4056
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Q4058
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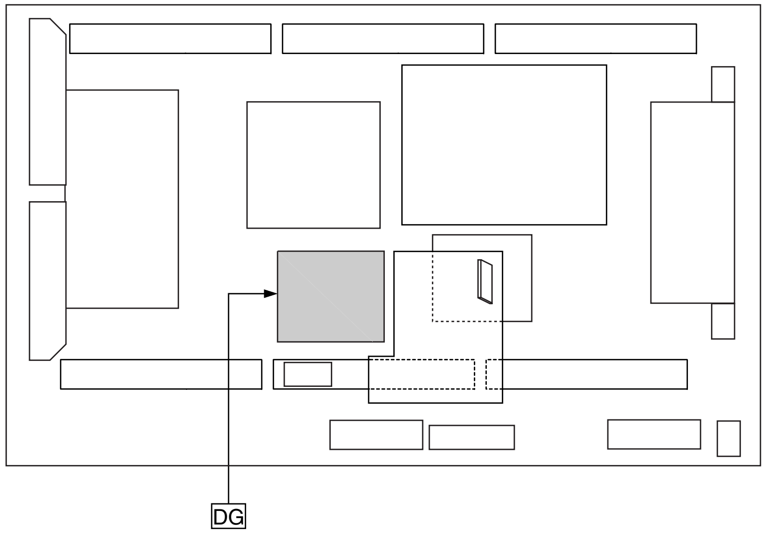
DG10
DG15
DG20
DG22
DG35



Parts Location

DG-BOARD (COMPONENT SIDE)					
IC		**TRANSISTOR**		Q4056	F-4
IC1100	C-4	Q1104	B-2	Q4057	F-4
IC1102	A-2	Q1105	C-2	Q4058	F-4
IC1103	B-3	Q1108	B-2	Q4059	F-5
IC1105	B-2	Q1109	B-2	Q4060	E-2
IC1106	C-2	Q1110	B-2	Q4062	D-2
IC1107	D-2	Q1113	A-2	Q4063	D-2
IC1111	A-2	Q1114	B-2	Q4064	D-2
IC4013	E-3	Q1115	A-2	Q4080	F-4
IC4014	D-1	Q1116	B-2	Q4081	F-4
IC4019	F-4	Q1121	C-2	**TP**	
IC4020	D-3	Q1130	D-2	TP1108	A-4
IC4022	F-2	Q1131	D-2	TP1109	A-5
IC4023	F-1	Q1132	C-2		
IC4025	F-3	Q1133	C-2		
IC4026	F-2	Q1142	C-1		
IC4027	E-1	Q1143	C-1		
IC4028	F-3	Q4040	E-2		
IC4032	D-5	Q4041	E-1		
IC4033	F-5	Q4042	E-2		
IC4034	D-4	Q4043	E-2		
IC4035	E-4	Q4044	E-2		
IC4036	B-4	Q4046	E-2		
IC4037	D-4	Q4050	F-5		
IC4038	E-4	Q4051	D-1		
IC4039	C-4	Q4052	D-2		
IC4040	D-2	Q4054	D-2		

TH-50PV60A
DG-BOARD TNPA3756CP

A B C D E F G H I

DG-BOARD (FOIL SIDE)
TNPA3756CP

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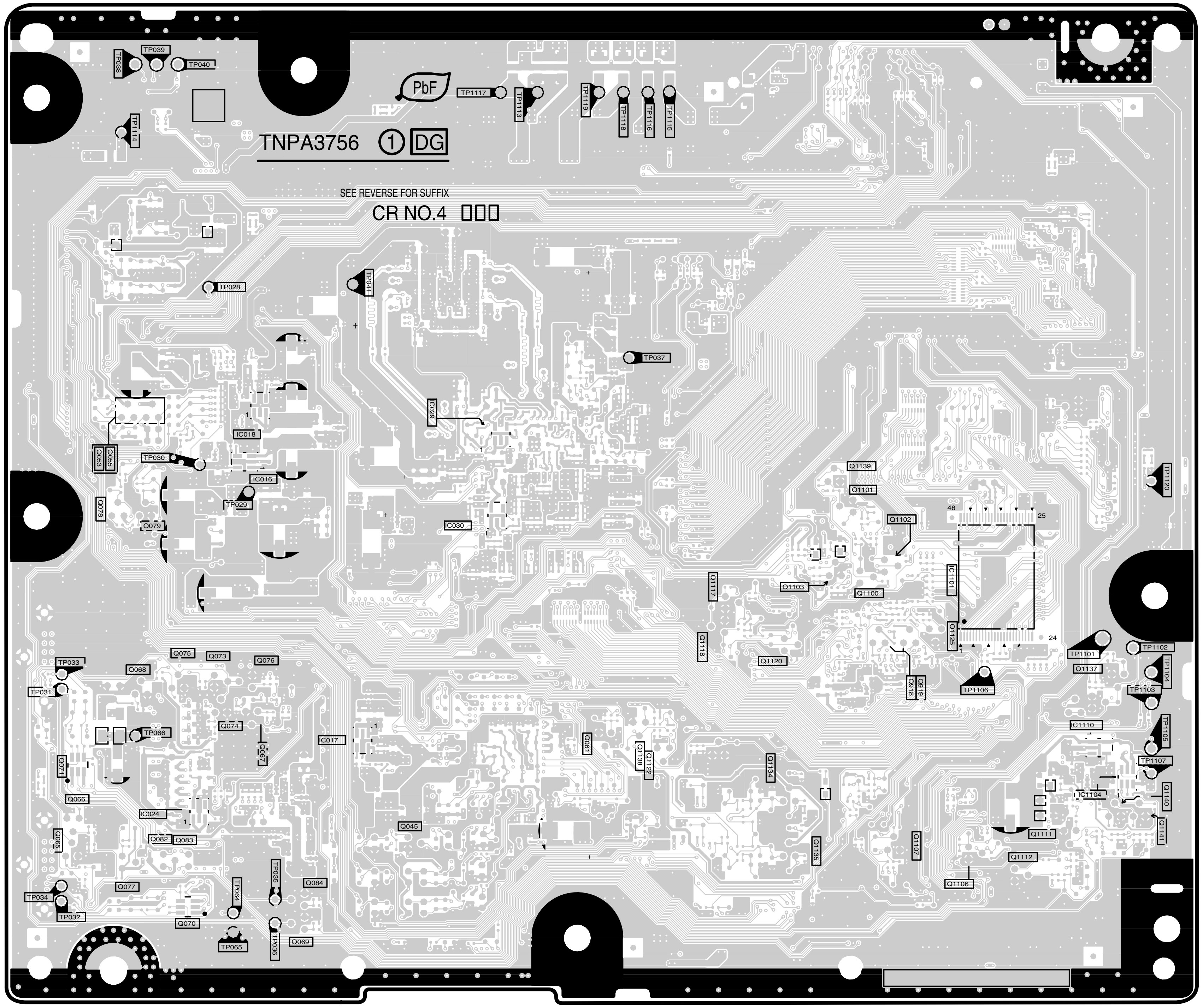
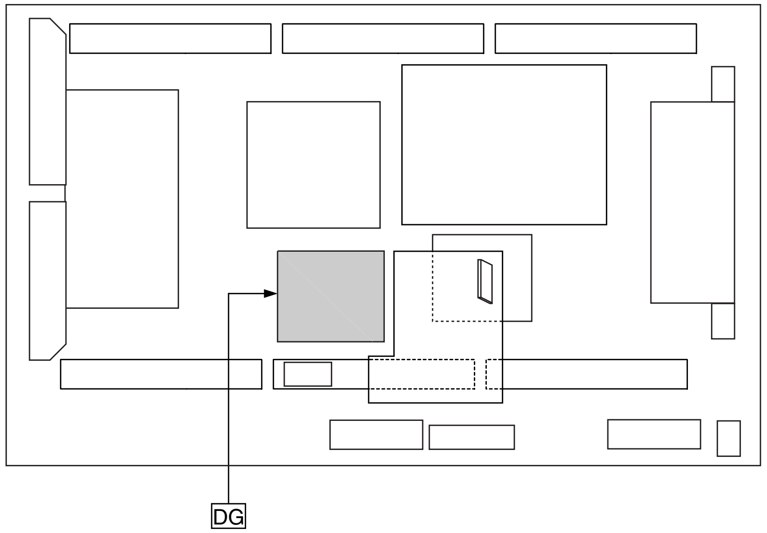

PbF
TNPA3756 ① DG
SEE REVERSE FOR SUFFIX
CR NO.4
TP039
TP038
TP040
TP1114
TP1117
TP1113
TP1119
TP1118
TP1116
TP1115
TP028
TP041
TP037
IC029
IC018
TP030
IC016
TP029
Q053
Q051
Q078
Q079
IC030
Q1139
Q1101
Q1102
TP1120
48
25
24
Q1117
Q1103
Q1100
IC1101
Q1125
Q1118
Q1120
Q1118
Q1119
TP1106
TP1101
TP1102
Q1137
TP1104
TP1103
IC1110
TP1105
TP1107
IC1104
Q1140
Q1141
Q1111
Q1112
Q1106
Q1107
Q1135
Q1134
Q1122
Q1138
Q061
Q045
IC017
Q067
Q074
TP066
TP033
TP031
Q068
Q075
Q073
Q076
Q071
Q066
IC024
Q082
Q083
Q065
Q077
TP034
TP032
Q070
TP064
TP065
TP035
TP036
Q084
Q069

A B C D E F G H I

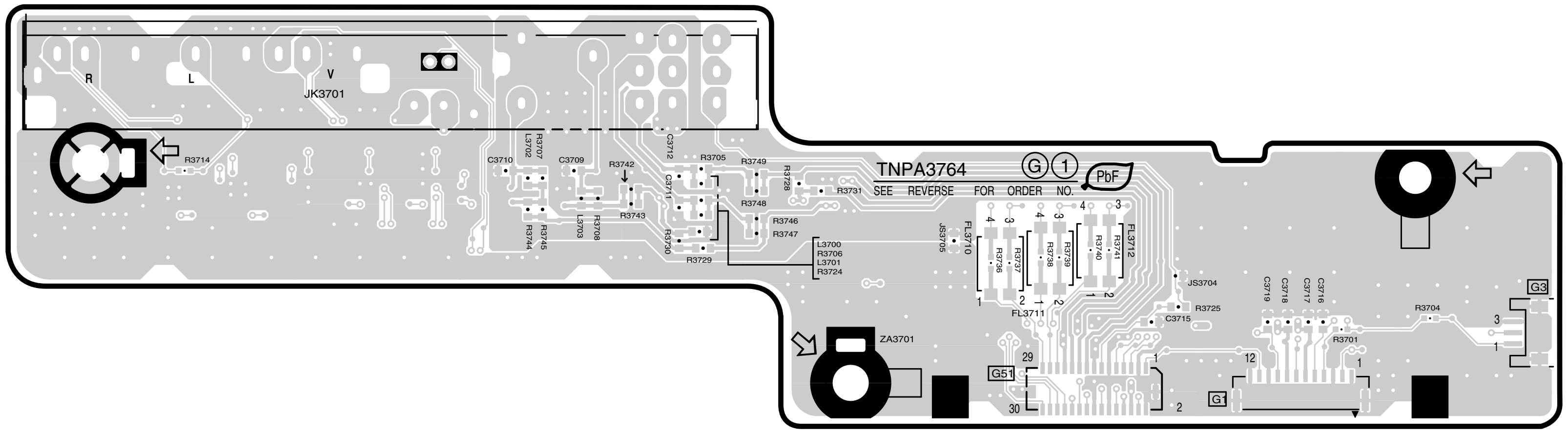


Parts Location

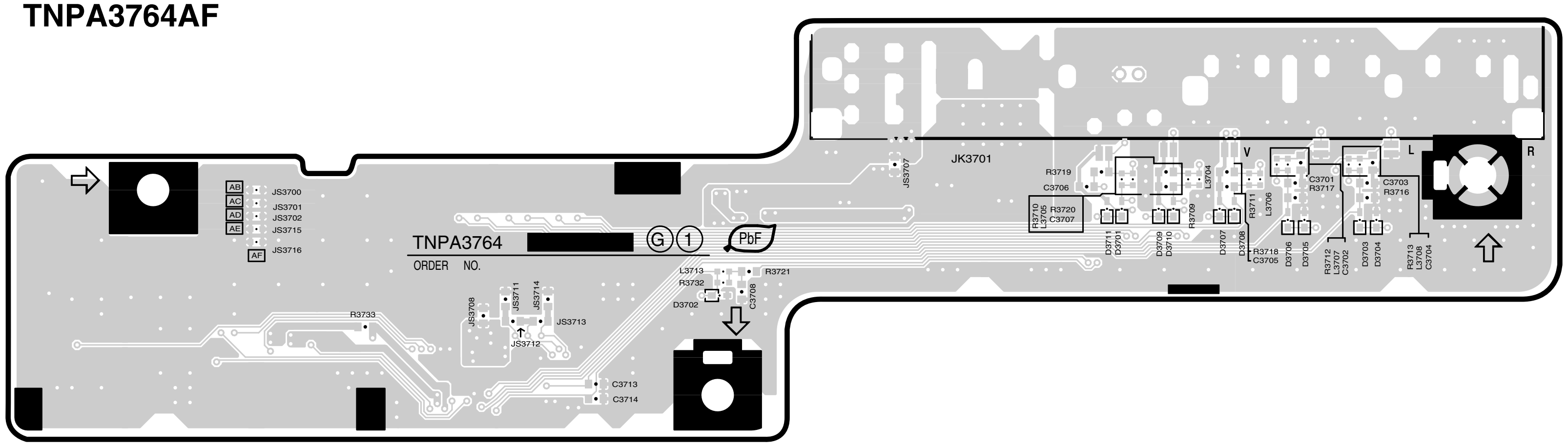
DG-BOARD (FOIL SIDE)

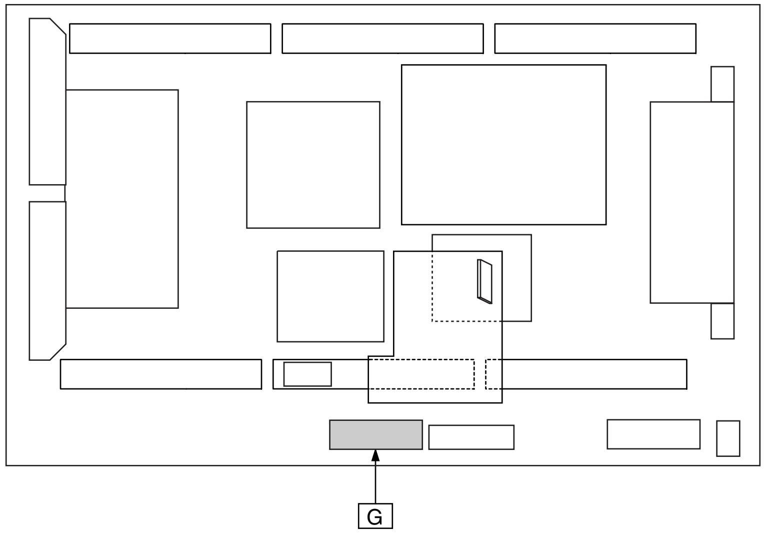
IC				**TP**	
IC1101	E-3	Q4045	C-2	TP1101	F-3
IC1104	F-2	Q4053	A-3	TP1102	F-3
IC1110	F-2	Q4055	A-3	TP1103	F-2
IC4016	B-3	Q4061	D-2	TP1104	F-2
IC4017	B-2	Q4065	A-2	TP1105	F-2
IC4018	B-4	Q4066	A-2	TP1106	F-2
IC4024	B-2	Q4067	B-2	TP1107	F-2
IC4029	C-4	Q4068	B-2	TP1113	C-5
IC4030	C-3	Q4069	B-1	TP1114	B-5
TRANSISTOR		Q4070	B-1	TP1115	D-5
Q1100	E-3	Q4071	A-2	TP1116	D-5
Q1101	E-3	Q4073	B-3	TP1117	C-5
Q1102	E-3	Q4074	B-2	TP1118	D-5
Q1103	E-3	Q4075	B-3	TP1119	D-5
Q1106	E-1	Q4076	B-3	TP1120	F-3
Q1107	E-2	Q4077	B-1	TP4028	B-4
Q1111	F-2	Q4078	A-3	TP4029	B-3
Q1112	F-2	Q4079	B-3	TP4030	B-3
Q1117	D-3	Q4082	B-2	TP4031	A-2
Q1118	D-3	Q4083	B-2	TP4032	A-4
Q1120	E-3	Q4084	B-1	TP4033	A-3
Q1122	D-2	Q4918	E-2	TP4034	A-1
Q1125	E-3	Q4919	E-2	TP4035	B-1
Q1134	E-2			TP4036	B-1
Q1135	E-2			TP4037	D-4
Q1137	F-2			TP4038	B-5
Q1138	D-2			TP4039	B-5
Q1139	E-3			TP4040	B-5
Q1140	F-2			TP4041	C-4
Q1141	F-2			TP4064	B-1
				TP4065	B-1
				TP4066	B-2

G-BOARD (FOIL SIDE)
TNPA3764AF

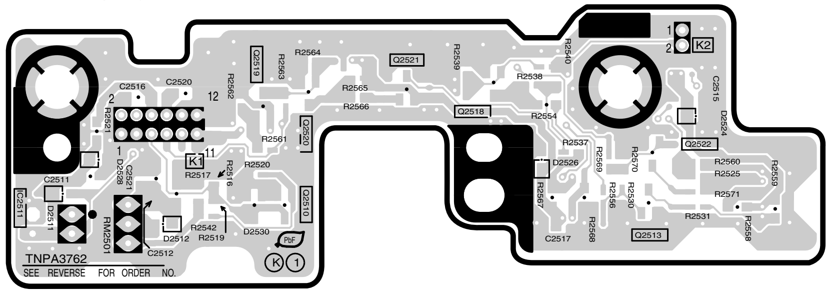

R
L
V
JK3701
R3714
C3710
R3707
L3702
C3709
R3742
C3712
R3705
R3749
R3728
R3731
C3711
R3748
R3743
R3746
R3747
R3744
R3745
L3703
R3708
R3730
R3729
L3700
R3706
L3701
R3724
TNPA3764
G
1
SEE REVERSE FOR ORDER NO.
PbF
FL3710
JS3705
R3736
R3737
R3738
R3739
FL3711
R3740
R3741
FL3712
JS3704
C3719
C3718
C3717
C3716
R3725
C3715
R3704
R3701
G3
ZA3701
G51
29
30
1
2
12
G1

G-BOARD (COMPONENT SIDE)
TNPA3764AF


AB
AC
AD
AE
AF
JS3700
JS3701
JS3702
JS3715
JS3716
TNPA3764
G
1
PbF
ORDER NO.
R3733
JS3708
JS3711
JS3714
JS3713
JS3712
L3713
R3732
D3702
R3721
C3708
C3713
C3714
JS3707
JK3701
R3719
C3706
R3710
R3720
C3707
D3711
D3701
D3709
D3710
L3704
D3707
D3708
R3711
L3705
R3718
C3705
C3701
R3717
R3712
L3707
C3702
D3703
D3704
C3703
R3716
R3713
L3708
C3704
V
L
R



K-BOARD (FOIL SIDE)
TNPA3762AE


TNPA3762
SEE REVERSE FOR ORDER NO.
K1
K2
K 1
PbF
Q2519
Q2521
Q2518
Q2520
Q2510
Q2522
Q2513
RM2501
D2511
D2512
D2526
D2524
D2530
C2516
C2520
C2511
C2512
C2517
C2515
R2564
R2563
R2565
R2566
R2561
R2562
R2539
R2538
R2540
R2554
R2537
R2520
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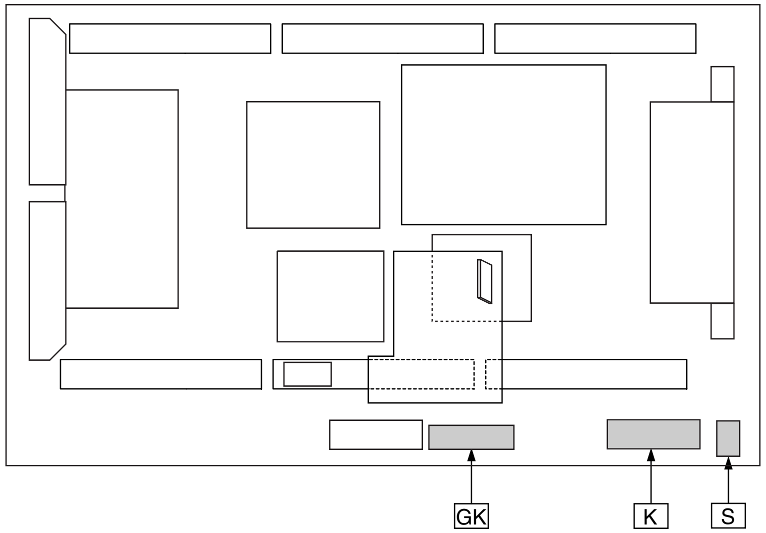
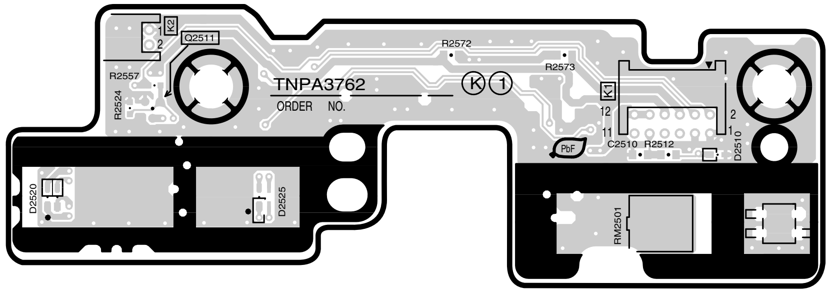
R2516
R2542
R2519
R2560
R2525
R2571
R2531
R2559
R2558



K-BOARD (COMPONENT SIDE)
TNPA3762AE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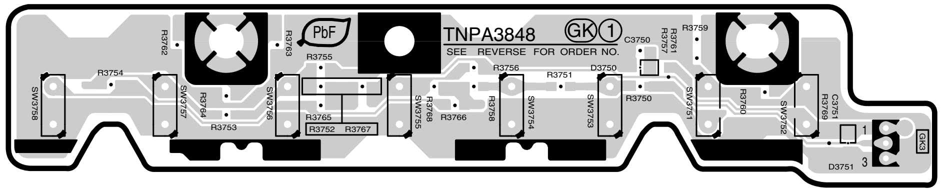
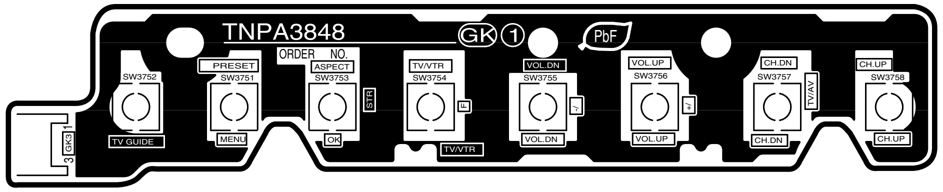
ORDER NO.
K 1
PbF
K1
K2
Q2511
R2572
R2573
R2557
R2524
C2510
R2512
D2510
D2520
D2525
RM2501

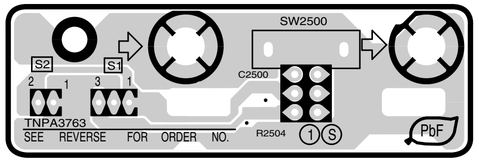
GK-BOARD (FOIL SIDE)
TNPA3848AD


TNPA3848
SEE REVERSE FOR ORDER NO.
GK 1
PbF
GK3
R3754
R3755
R3756
R3751
D3750
R3750
C3750
R3759
R3753
R3765
R3752
R3767
R3766
SW3758
SW3757
SW3756
SW3755
SW3754
SW3753
SW3751
SW3752
C3751
D3751

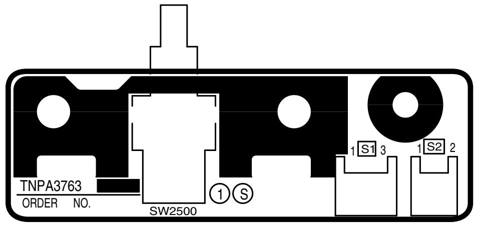
GK-BOARD (COMPONENT SIDE)
TNPA3848AD


TNPA3848
ORDER NO.
GK 1
PbF
SW3752
TV GUIDE
PRESET
SW3751
MENU
ASPECT
SW3753
OK
TV/VTR
SW3754
TV/VTR
VOL.DN
SW3755
VOL.DN
VOL.UP
SW3756
VOL.UP
CH.DN
SW3757
CH.DN
CH.UP
SW3758
CH.UP
GK3

S-BOARD (FOIL SIDE)
TNPA3763AC


SW2500
S2
S1
C2500
TNPA3763
SEE REVERSE FOR ORDER NO.
R2504
1 S
PbF

S-BOARD (COMPONENT SIDE)
TNPA3763AC


TNPA3763
ORDER NO.
SW2500
1 S
S1
S2

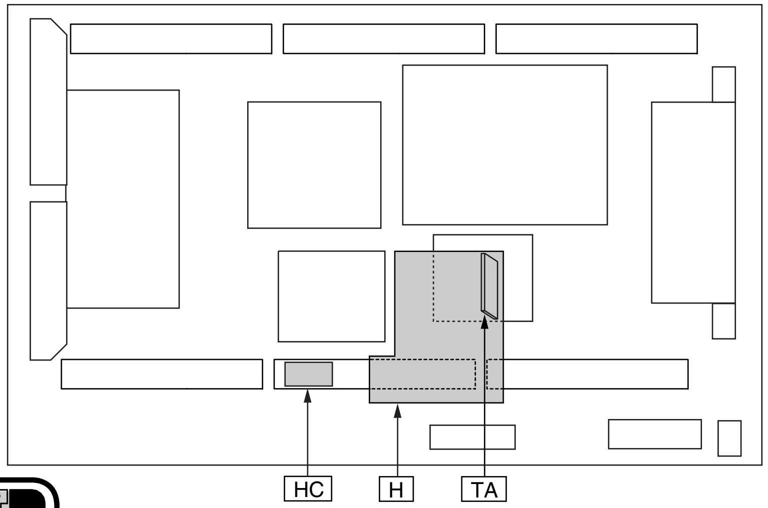
TH-50PV60A
GK-BOARD TNPA3848AD
K-BOARD TNPA3762AE
S-BOARD TNPA3763AC

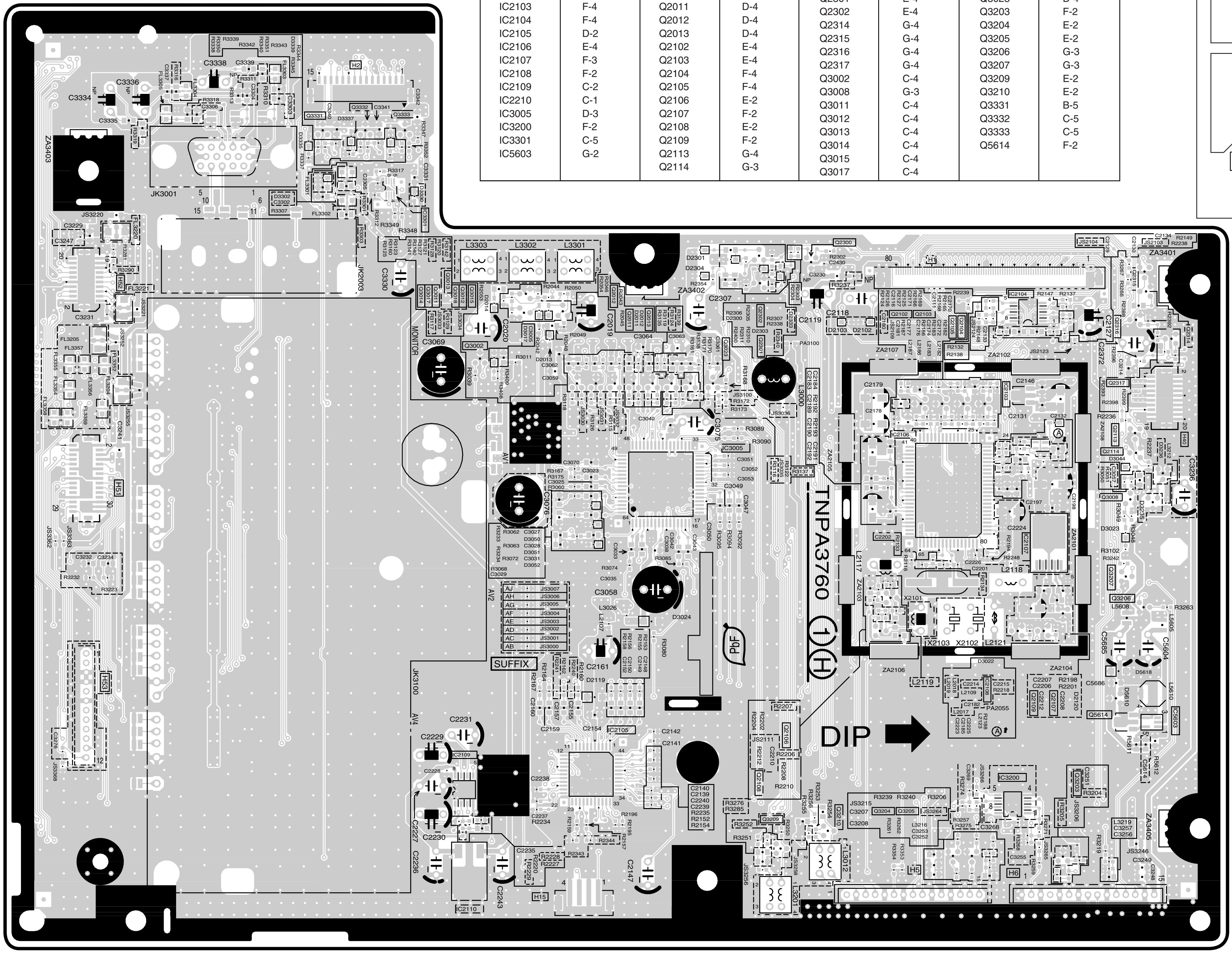
TH-50PV60A
GK-BOARD TNPA3848AD
K-BOARD TNPA3762AE
S-BOARD TNPA3763AC

H-BOARD (COMPONENT SIDE)
TNPA3760AD

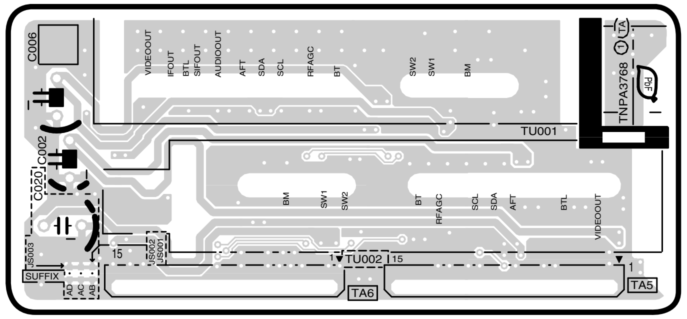
Parts Location

H-BOARD (COMPONENT SIDE)							
IC		TRANSISTOR		Q2300	E-5	Q3018	C-4
IC2103	F-4	Q2011	D-4	Q2301	E-4	Q3023	D-4
IC2104	F-4	Q2012	D-4	Q2302	E-4	Q3203	F-2
IC2105	D-2	Q2013	D-4	Q2314	G-4	Q3204	E-2
IC2106	E-4	Q2102	E-4	Q2315	G-4	Q3205	E-2
IC2107	F-3	Q2103	E-4	Q2316	G-4	Q3206	G-3
IC2108	F-2	Q2104	F-4	Q2317	G-4	Q3207	G-3
IC2109	C-2	Q2105	F-4	Q3002	C-4	Q3209	E-2
IC2210	C-1	Q2106	E-2	Q3008	G-3	Q3210	E-2
IC3005	D-3	Q2107	F-2	Q3011	C-4	Q3331	B-5
IC3200	F-2	Q2108	E-2	Q3012	C-4	Q3332	C-5
IC3301	C-5	Q2109	F-2	Q3013	C-4	Q3333	C-5
IC5603	G-2	Q2113	G-4	Q3014	C-4	Q5614	F-2
		Q2114	G-3	Q3015	C-4		
				Q3017	C-4		

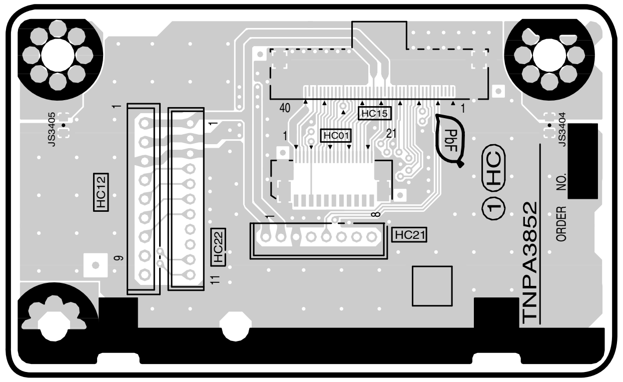


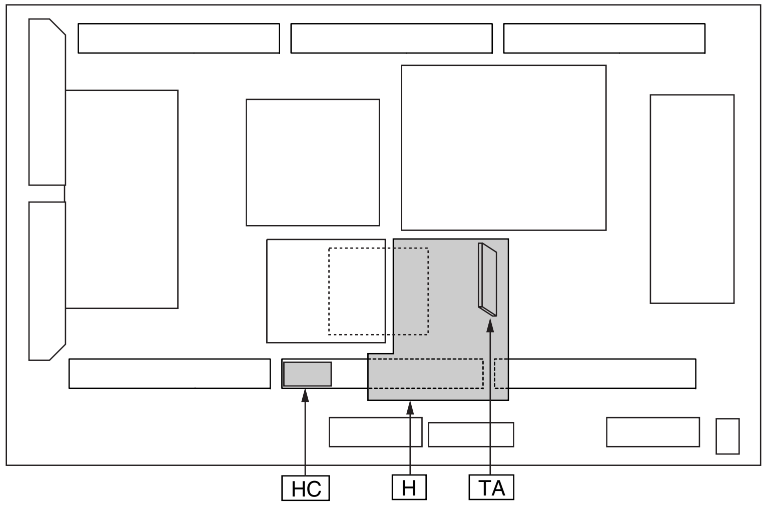

TNPA3760
DIP
SUFFIX
MONITOR
JK3001
JK2003
JK3100
ZA3403
ZA3402
ZA3401
ZA3405
L3303
L3302
L3301
IC3005
IC2105
IC2104
IC3200
PbF
1 2 3 4 5 6
A B C D E F G H I

TA-BOARD (COMPONENT SIDE)
TNPA3768AC

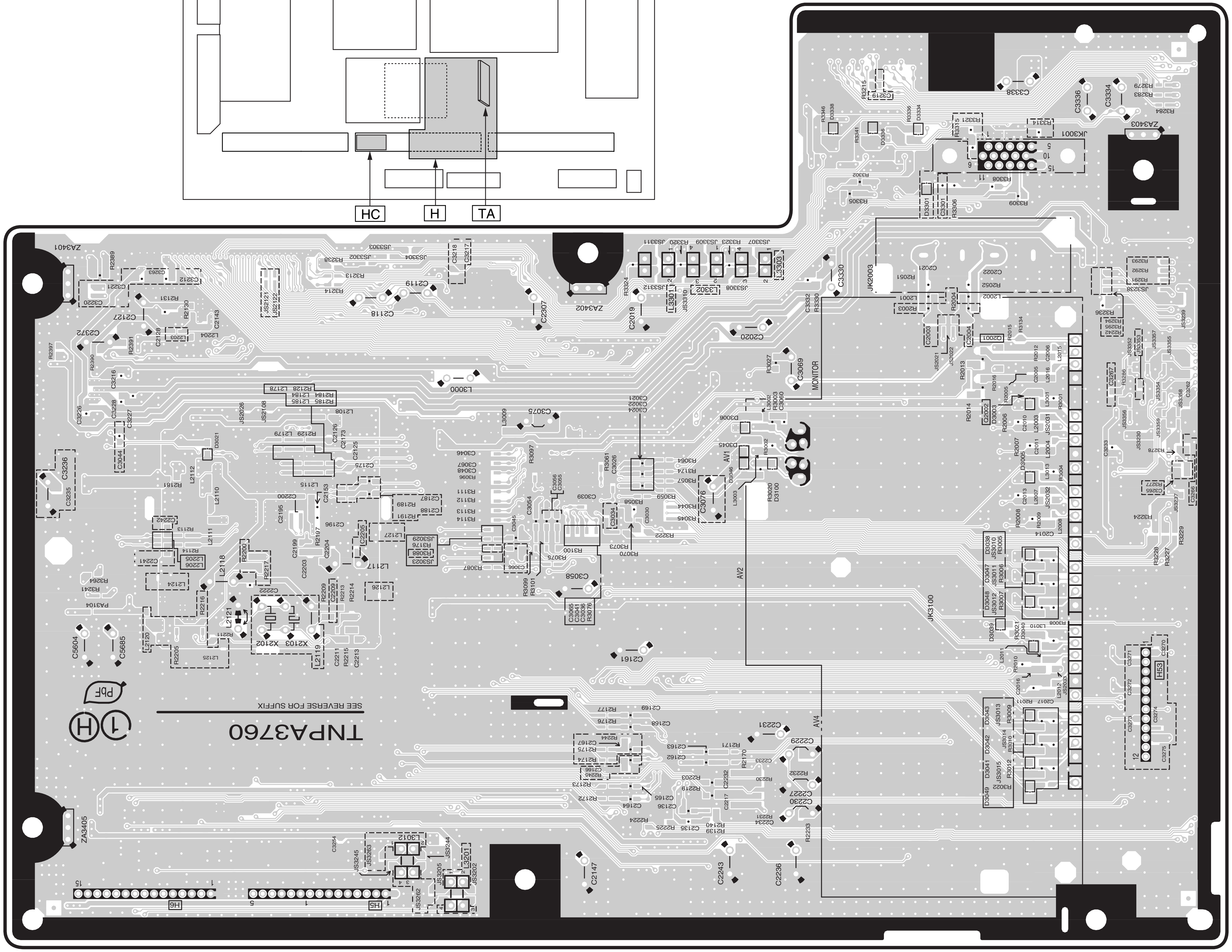

TNPA3768
TU001
TU002
TA5
TA6
SUFFIX
VIDEOOUT
BTL
AFT
SDA
SCL
RFAGC
BT
SW2
SW1
BM

HC-BOARD (COMPONENT SIDE)
TNPA3852


TNPA3852
HC01
HC12
HC15
HC21
HC22
JS3405
JS3404
ORDER NO.
PbF



H-BOARD (FOIL SIDE)
TNPA3760AD


TNPA3760
SEE REVERSE FOR SUFFIX
H
1
PbF
JK3001
JK2003
JK3100
ZA3401
ZA3402
ZA3403
ZA3405
MONITOR
AV1
AV2
AV4
H6
H5
H53
X2102
X2103
L3000

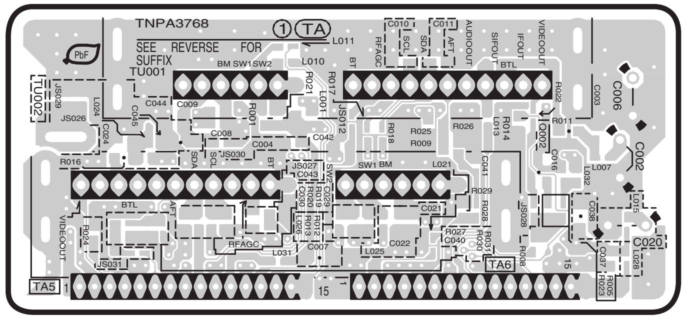
Parts Location

H-BOARD (FOIL SIDE)	
TRANSISTOR	
Q2001 Q2002	F-4 F-4

Parts Location

TA-BOARD (FOIL SIDE)	
TRANSISTOR	
Q002	I-3

TA-BOARD (FOIL SIDE)
TNPA3768AC


TNPA3768
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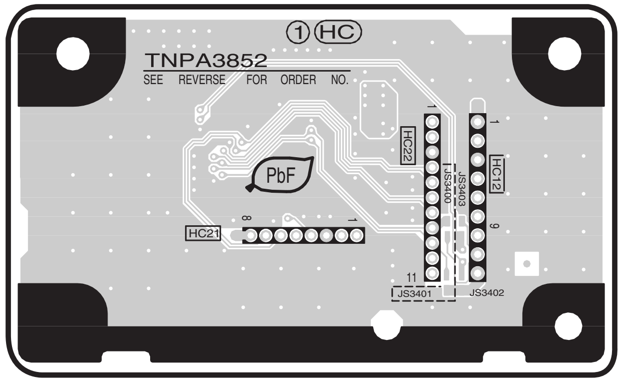
TA
SEE REVERSE FOR SUFFIX
PbF
TU001
TA5
TA6
15

HC-BOARD (FOIL SIDE)
TNPA3852


TNPA3852
SEE REVERSE FOR ORDER NO.
1
HC
PbF
HC21
HC22
HC12
JS3401
JS3402

TH-50PV60A H-BOARD TNPA3760AD
TH-50PV60A HC-BOARD TNPA3852

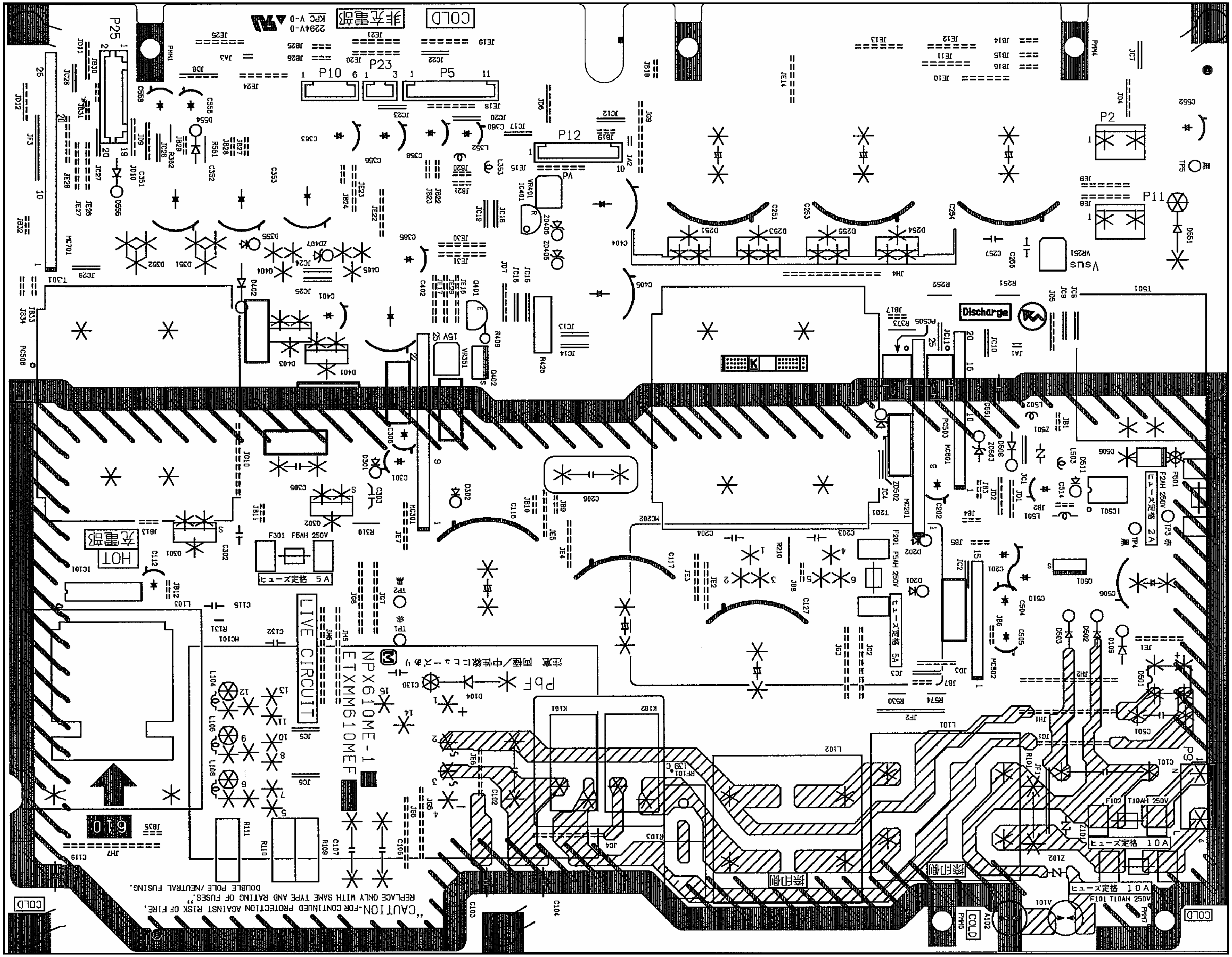
TH-50PV60A TA-BOARD TNPA3768AC

TH-50PV60A H-BOARD TNPA3760AD
TH-50PV60A HC-BOARD TNPA3852

TH-50PV60A TA-BOARD TNPA3768AC

6
5
4
3
2
1
A
B
C
D
E
F
G
H
I

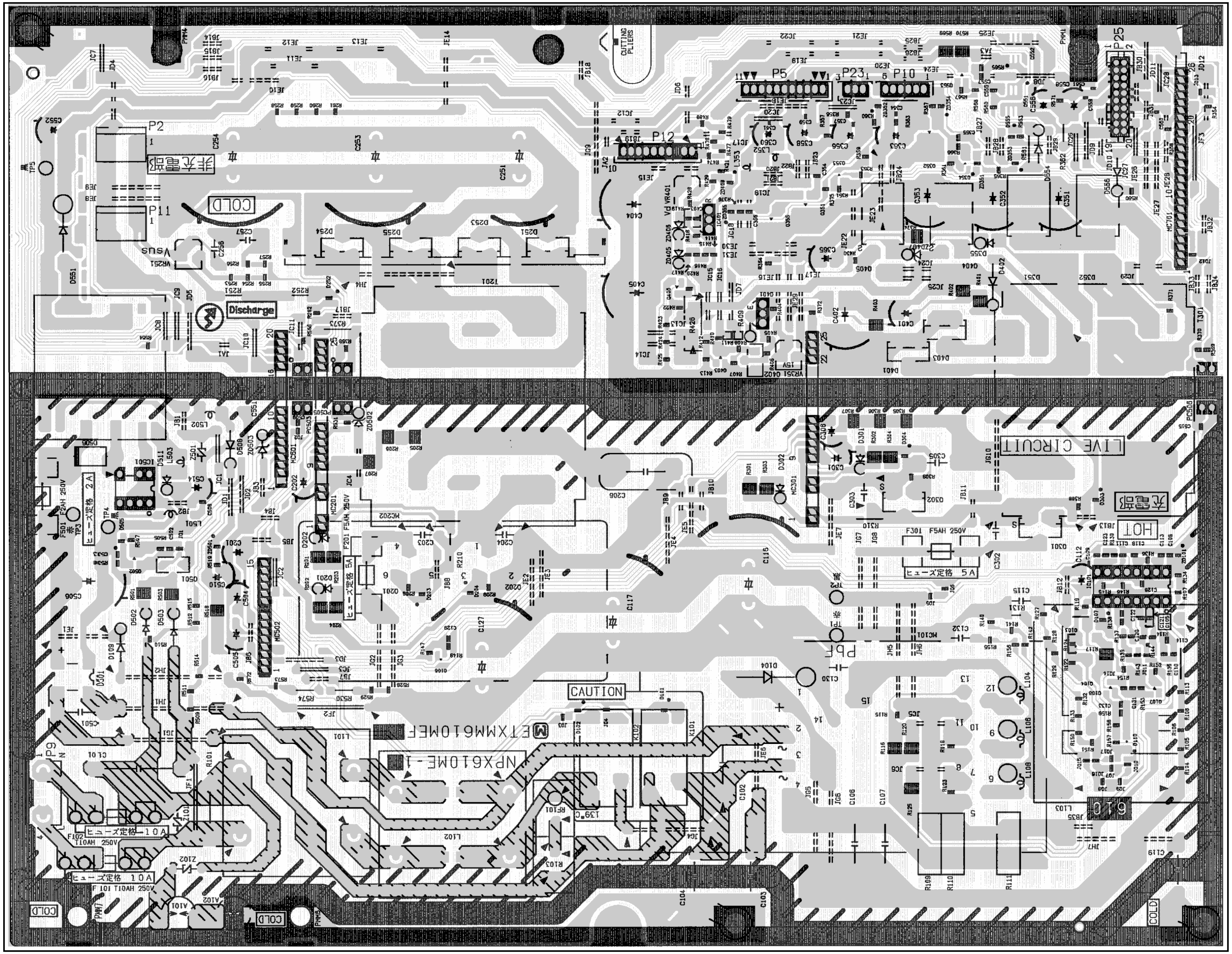
P-BOARD (COMPONENT SIDE)
ETXMM610MEF


P25
P10
P23
P5
P12
P2
P11
P9
COLD
HOT
LIVE CIRCUIT
NPX610ME-1
ETXMM610MEF
PbF
Discharge
Vsus
F301 F5AH 250V
F201 F5AH 250V
F501 F2AH 250V
F101 T10AH 250V
F102 T10AH 250V
ヒューズ定格 5A
ヒューズ定格 10A
ヒューズ定格 2A
"CAUTION-FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE AND RATING OF FUSES"
DOUBLE POLE /NEUTRAL FUSING.
610
MC701
MC301
MC201
MC202
MC501
MC502
L101
L102
K101
K102
T201
T301
T501
IC101
IC401
IC501
IC551
PC505
PC506
TP1
TP2
TP3
TP4
TP5
PMH1
PMH4
PMH6
PMH7

6
5
4
3
2
1

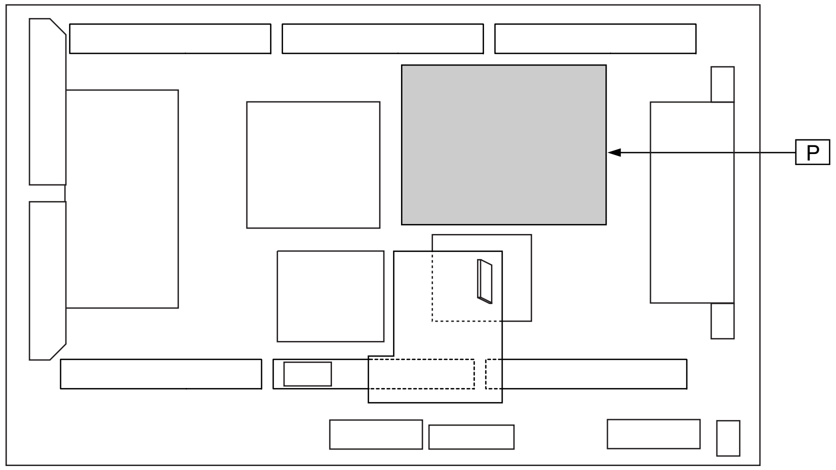
A B C D E F G H I

P-BOARD (FOIL SIDE)
ETXMM610MEF


6
5
4
3
2
1
A
B
C
D
E
F
G
H
I
P2
P11
P12
P5
P23
P10
P25
P9
COLD
Vsus
Discharge
CUTTING PLIERS
LIVE CIRCUIT
HOT
CAUTION
ETXMM610MEF
NPX610ME-1
F301 F5AH 250V
F201 F5AH 250V
F501 F2AH 250V
F101 T10AH 250V
F102 T10AH 250V
ヒューズ定格 5A
ヒューズ定格 2A
ヒューズ定格 10A
充電部
非充電部

TH-50PV60A
P-BOARD ETXMM610MEF

TH-50PV60A
P-BOARD ETXMM610MEF



Parts Location

P-BOARD (FOIL SIDE)

IC	
IC101	H-3
IC401	F-5
IC501	B-3

PHOTO COUPLER	
PC503	C-4
PC505	C-4
PC506	H-4

TRANSISTOR	
Q103	H-2
Q104	H-2
Q106	H-2
Q301	H-3
Q302	G-3
Q351	F-5
Q352	G-5
Q353	F-5
Q354	F-4
Q401	F-4
Q402	G-4
Q403	E-4
Q404	G-5
Q405	F-5
Q406	E-4
Q501	B-3
Q502	B-3
Q551	G-5
Q552	G-6
Q553	G-6

MODULE	
MC101	G-3
MC201	C-3
MC202	D-3
MC301	F-3
MC502	C-2
MC601	C-4
MC701	H-5

VOLUME	
VR251	C-5
VR351	F-4
VR401	E-5

Parts Location

P-BOARD (COMPONENT SIDE)

IC	
IC101	B-3
IC401	E-5
IC501	H-3

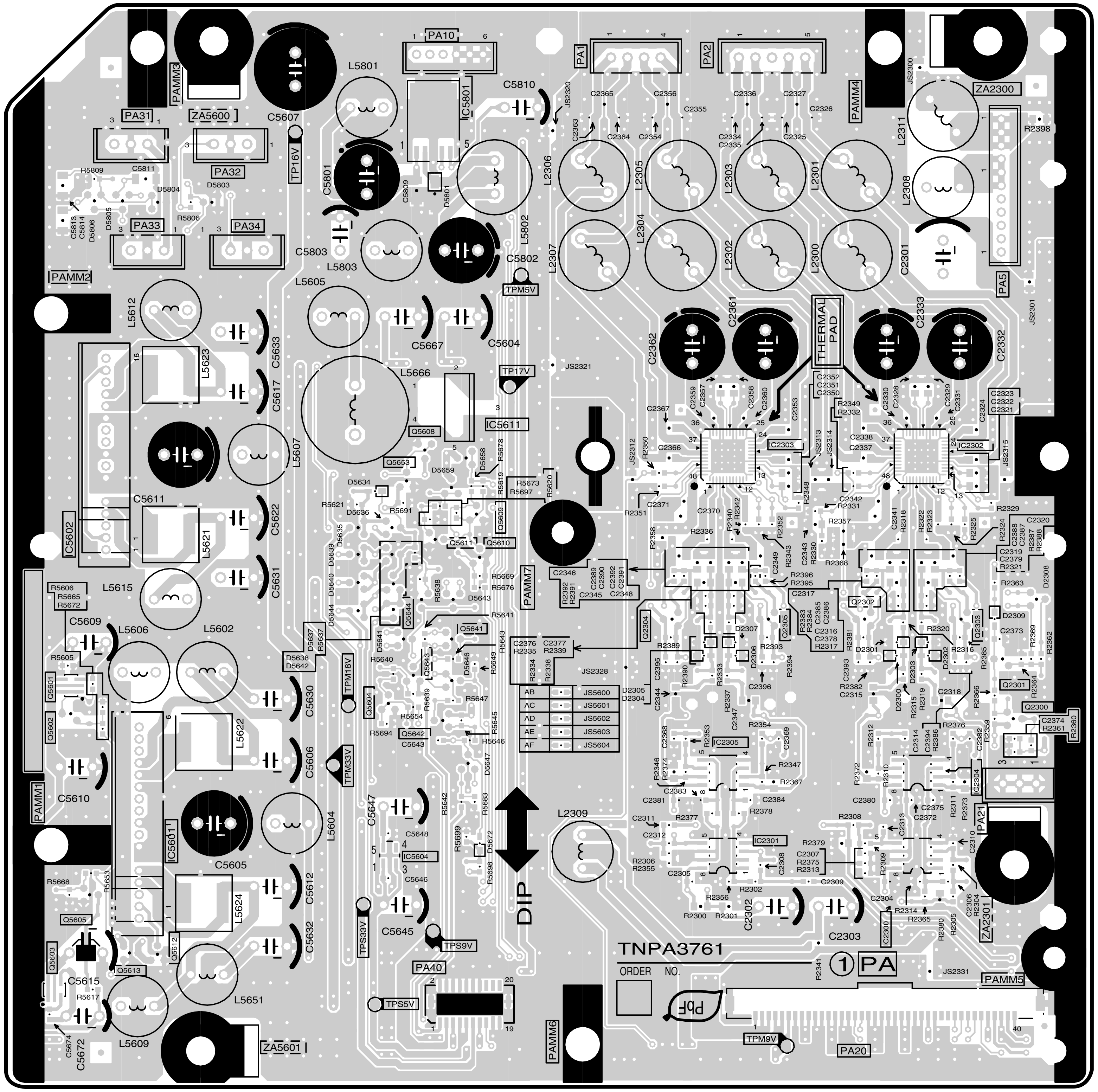
PHOTO COUPLER	
PC503	G-4
PC505	G-4
PC506	B-4

VOLUME	
VR251	H-5
VR351	D-4
VR401	E-5

MODULE	
MC101	C-3
MC201	G-3
MC202	E-3
MC301	D-3
MC502	G-2
MC601	G-4
MC701	B-5

TRANSISTOR	
Q301	C-3
Q302	C-3
Q401	E-5
Q402	D-4
Q404	C-5
Q405	D-5
Q501	H-3

PA-BOARD (COMPONENT SIDE)
TNPA3761AC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ORDER NO.
①PA
THERMAL PAD
DIP
PbF
PA10
PA1
PA2
PA5
PA20
PA21
PA31
PA32
PA33
PA34
PA40
PAMM1
PAMM2
PAMM3
PAMM4
PAMM5
PAMM6
PAMM7
ZA2300
ZA2301
ZA5600
ZA5601
IC2300
IC2301
IC2302
IC2303
IC2304
IC2305
IC5601
IC5602
IC5604
IC5611
IC5801
TP16V
TP17V
TPM5V
TPM18V
TPM33V
TPS5V
TPS9V
TPS33V
L2300
L2301
L2302
L2303
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L2309
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L5624
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L5801
L5802
L5803
C2301
C2302
C2303
C2332
C2333
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C2362
C5601
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C5604
C5605
C5606
C5607
C5609
C5610
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C5645
C5647
C5667
C5672
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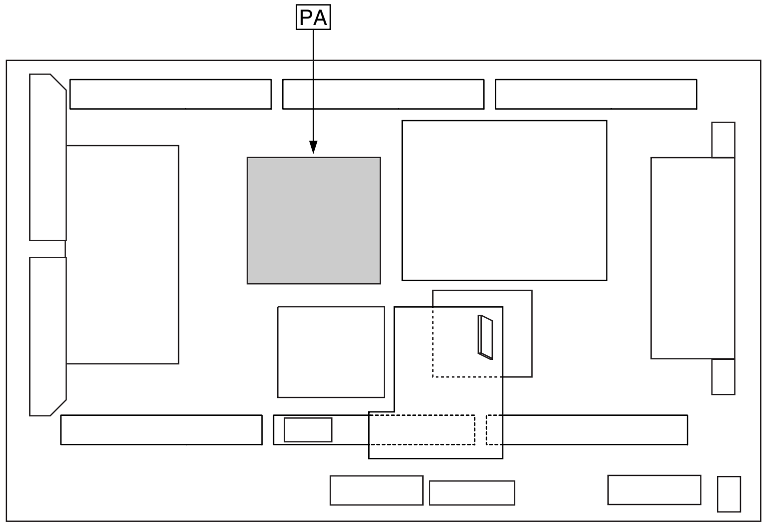
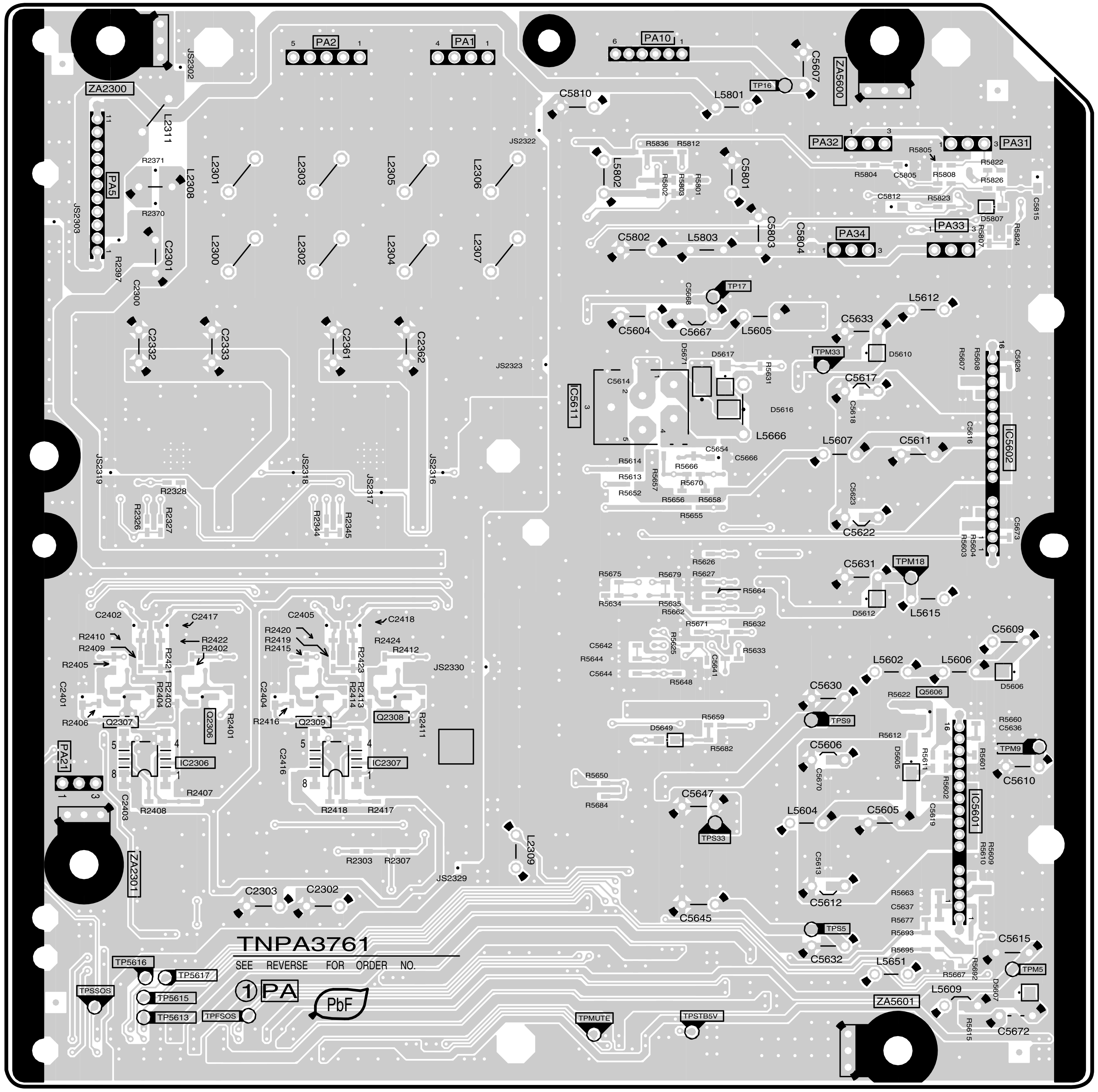
JS5601
JS5602
JS5603
JS5604
AB
AC
AD
AE
AF



Parts Location

PA-BOARD (COMPONENT SIDE)					
IC		TRANSISTOR		TP	
IC2300	E-2	Q2300	F-3	TP16V	B-5
IC2301	D-2	Q2301	F-3	TP17V	C-4
IC2302	E-4	Q2302	E-3	TPM5V	C-5
IC2303	E-4	Q2303	E-3	TPM18V	B-3
IC2304	E-2	Q2304	D-3	TPM33V	B-2
IC2305	D-3	Q2305	E-3	TPS5V	C-1
IC5601	B-2	Q5601	A-3	TPS9V	C-2
IC5602	A-3	Q5602	A-3	TPS33V	C-2
IC5604	C-2	Q5603	A-1		
IC5611	C-4	Q5604	C-3		
IC5801	C-5	Q5605	A-2		
		Q5608	C-4		
		Q5609	C-4		
		Q5610	C-3		
		Q5612	B-1		
		Q5613	A-1		
		Q5641	C-3		
		Q5642	C-3		
		Q5643	C-3		
		Q5644	C-3		
		Q5653	C-4		

PA-BOARD (FOIL SIDE)
TNPA3761AC


ZA2300
PA5
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PA1
PA10
ZA5600
TP16
C5607
C5810
L5801
PA32
PA31
PA34
PA33
L2311
L2308
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L2303
L2305
L2306
L2300
L2302
L2304
L2307
C2301
C2300
L5802
C5801
C5802
L5803
C5803
C5804
D5807
TP17
C5604
C5667
L5605
C5633
L5612
TPM33
D5610
C2332
C2333
C2361
C2362
IC5611
C5614
D5617
D5616
L5666
C5617
IC5602
L5607
C5611
C5622
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L5606
D5606
C2402
C2417
C2405
C2418
Q2307
IC2306
Q2306
Q2309
Q2308
IC2307
PA21
ZA2301
C5630
TPS9
Q5606
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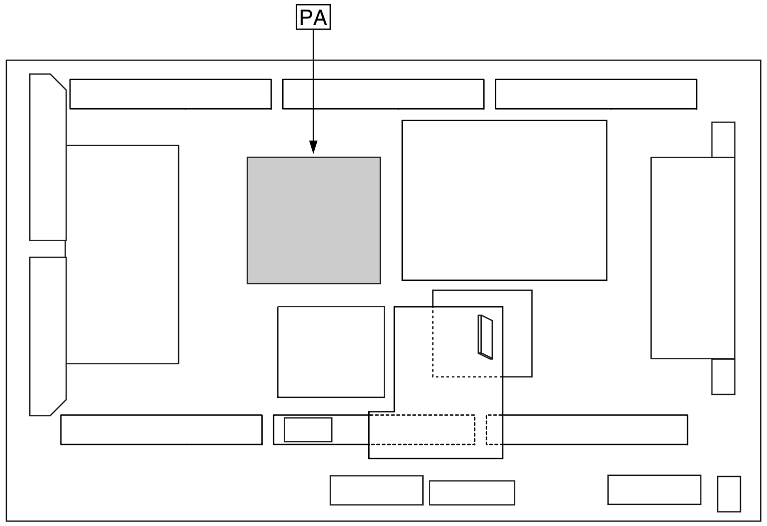
TPM9
C5610
C5647
TPS33
L5604
C5605
IC5601
L2309
C2303
C2302
C5645
C5612
TPS5
C5615
C5632
L5651
TPM5
L5609
ZA5601
C5672
TP5616
TP5617
TP5615
TP5613
TPSSOS
TPFSOS
TPMUTE
TPSTB5V
TNPA3761
SEE REVERSE FOR ORDER NO.
①PA
PbF



Parts Location

PA-BOARD (FOIL SIDE)			
IC		**TP**	
IC2306	B-2	TP16	D-6
IC2307	C-2	TP17	D-5
IC5601	E-2	TP5613	B-1
IC5602	F-4	TP5615	B-1
IC5611	D-4	TP5616	A-1
		TP5617	B-1
TRANSISTOR		TPFSOS	B-1
		TPM5	F-2
Q2306	B-3	TPM9	F-2
Q2307	A-2	TPM18	E-3
Q2308	C-3	TPM33	E-4
Q2309	B-3	TPMUTE	D-1
Q5606	E-3	TPS5	E-2
		TPS9	E-3
		TPS33	D-2
		TPSSOS	A-1
		TPSTB5V	D-1

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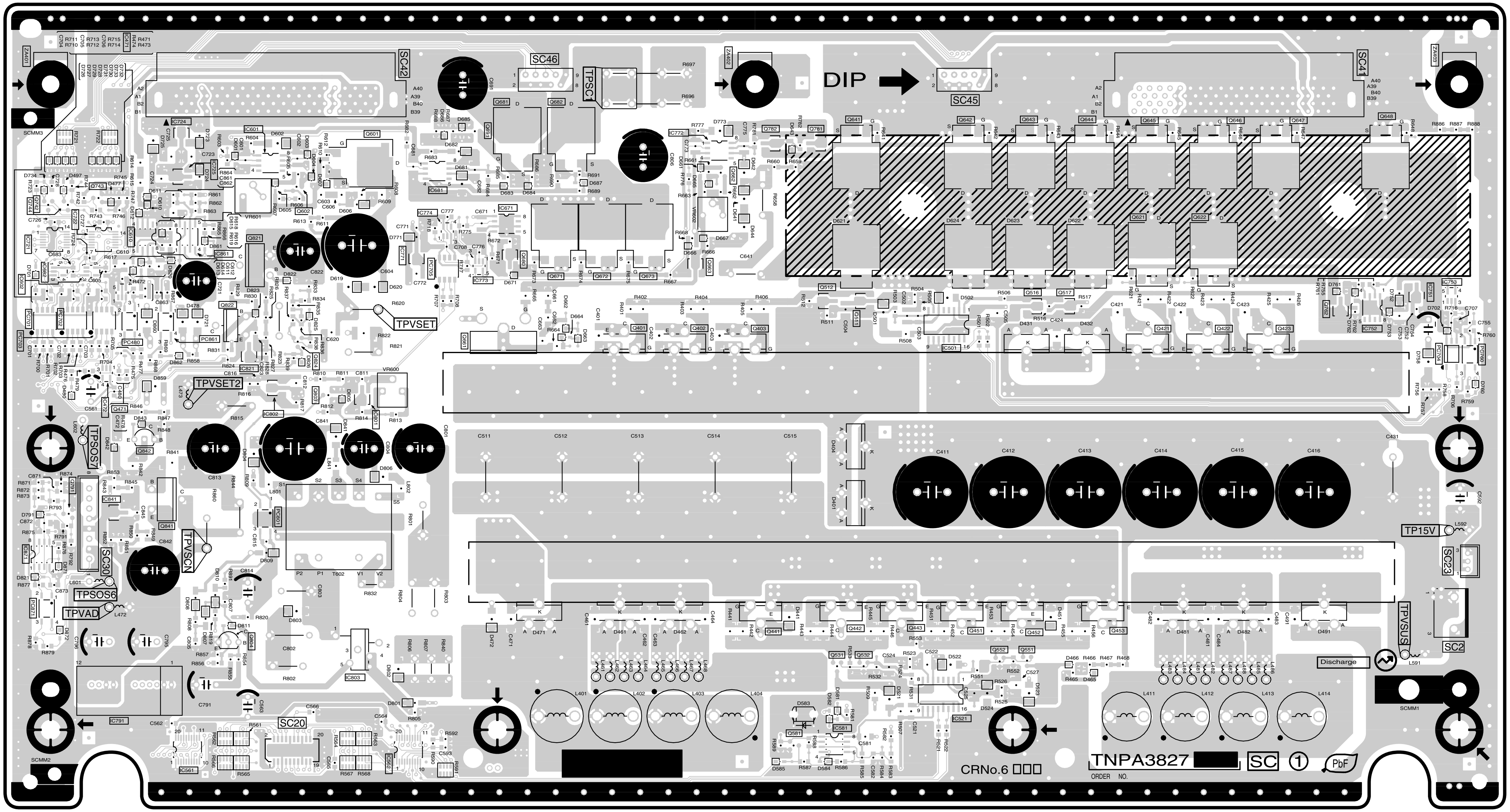
A B C D E F G H I

SC-BOARD (COMPONENT SIDE)
TNPA3827


SC42
SC46
TPSC1
ZA401
ZA402
ZA403
DIP
SC45
SC41
SCMM3
TPVSET
TPVSET2
TPSOS7
TPVSCN
SC30
TPSOS6
TPVAD
SCMM2
SC20
TP15V
SC23
TPVSUS
SC2
Discharge
SCMM1
CRNo.6
TNPA3827
SC ①
PbF
ORDER NO.
6
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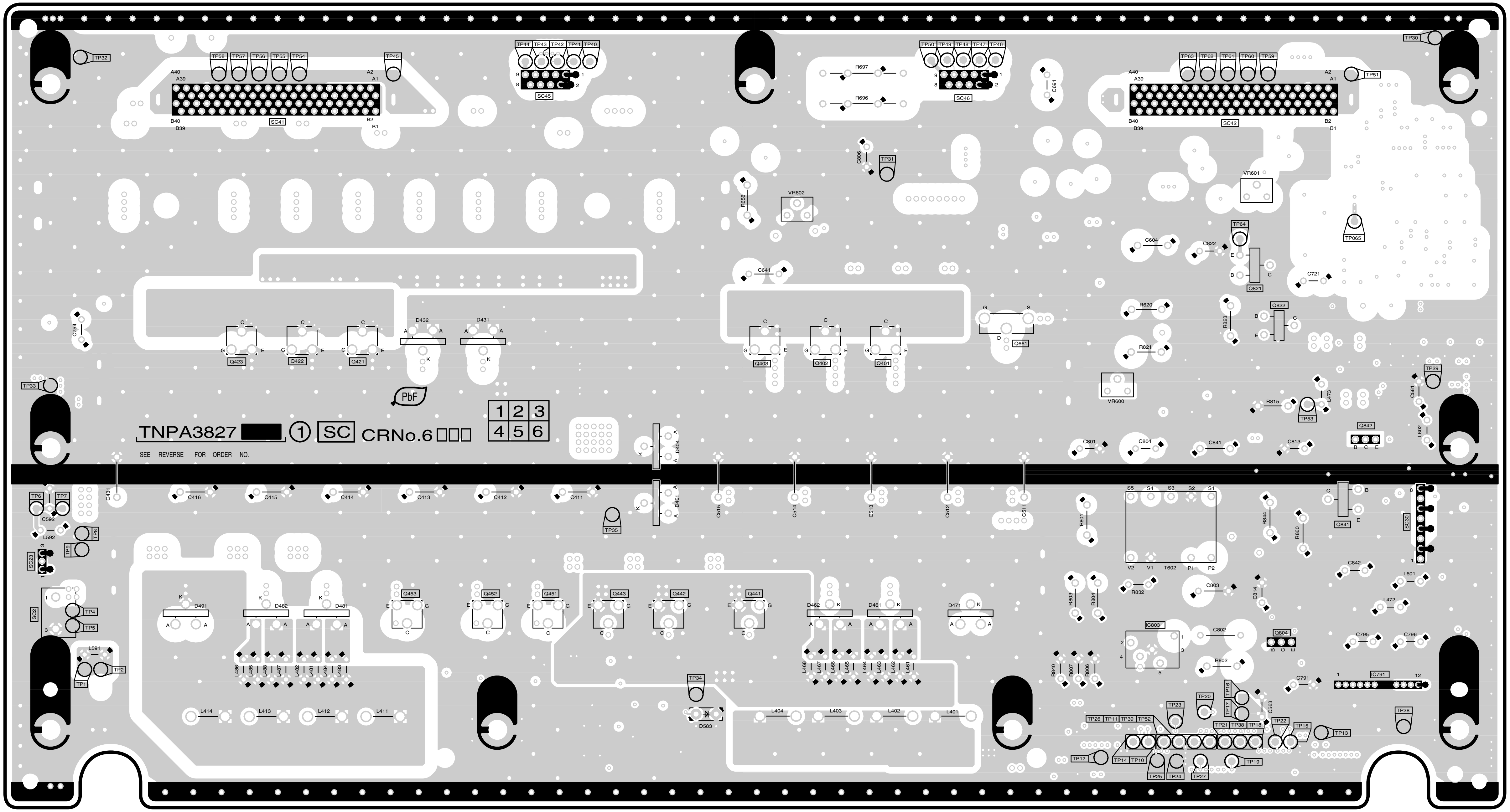
SC-BOARD (FOIL SIDE)
TNPA3827


TNPA3827 ① SC CRNo.6
SEE REVERSE FOR ORDER NO.
1 2 3
4 5 6
PbF
SC41
SC42
SC45
SC46
VR601
VR602
VR600
Q401
Q402
Q403
Q421
Q422
Q423
D431
D432
Q661
Q821
Q822
Q841
Q842
T602
IC803
IC791
D583
L401
L402
L403
L404
L411
L412
L413
L414
C411
C412
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C414
C415
C416
C511
C512
C513
C514
C515
Q441
Q442
Q443
Q451
Q452
Q453
D461
D462
D471
D481
D482
D491
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SC21
SC23

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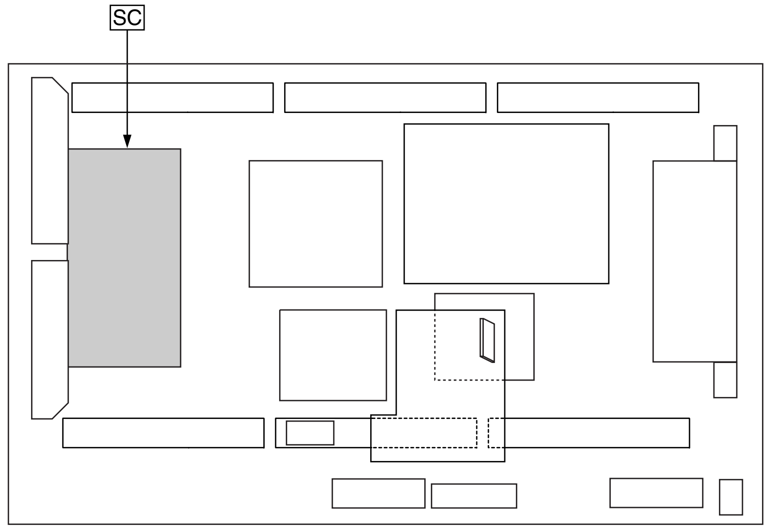


Parts Location

SC-BOARD (FOIL SIDE)

IC	
IC6791	H-2
IC6803	G-2

TRANSISTOR	
Q6401	F-4
Q6402	E-4
Q6403	E-4
Q6421	C-4
Q6422	C-4
Q6423	B-4
Q6441	E-2
Q6442	E-2
Q6443	D-2
Q6451	D-2
Q6452	D-2
Q6453	C-2
Q6804	H-2
Q6821	H-4
Q6822	H-4
Q6841	H-3
Q6842	H-3

TP	
TP1	B-2
TP2	B-2
TP4	A-2
TP5	A-2
TP6	A-3
TP7	A-3
TP8	B-3
TP9	A-3
TP10	G-1
TP11	G-2
TP12	G-1
TP13	H-2
TP14	G-1
TP15	H-2
TP16	H-2
TP17	H-2
TP18	H-2
TP19	H-1
TP20	G-2
TP21	H-2
TP22	H-2
TP23	G-2
TP24	G-1
TP25	G-1
TP26	G-2
TP27	G-1
TP28	H-2
TP29	I-4
TP30	I-5
TP31	F-5
TP32	B-5
TP33	A-3
TP34	E-2
TP35	D-3
TP38	H-2
TP39	G-2
TP40	D-5
TP41	D-5
TP42	D-5
TP43	D-5
TP44	D-5
TP45	C-5
TP46	F-5
TP47	F-5
TP48	F-5
TP49	F-5
TP50	F-5
TP51	H-5
TP52	G-2
TP53	H-3
TP54	C-5
TP55	C-5
TP56	B-5
TP59	H-5
TP60	H-5
TP61	H-5
TP62	G-5
TP63	G-5
TP64	H-4
TP65	H-4
TP67	B-5
TP68	B-5

VOLUME	
VR6600	G-3
VR6601	H-5
VR6602	E-4

Parts Location

SC-BOARD (COMPONENT SIDE)

IC	
IC6471	B-5
IC6472	B-3
IC6501	F-4
IC6521	F-2
IC6561	B-1
IC6562	C-1
IC6581	F-2
IC6601	B-5
IC6602	A-4
IC6610	B-4
IC6671	D-4
IC6681	C-4
IC6682	A-4
IC6721	A-4
IC6722	A-4
IC6724	B-5
IC6725	B-5
IC6751	I-4
IC6752	H-4
IC6753	I-4
IC6771	C-4
IC6772	E-5
IC6773	D-4
IC6774	C-4
IC6791	B-2
IC6801	C-3
IC6802	B-3
IC6803	C-2
IC6821	B-4
IC6841	B-3
IC6861	B-4
IC6871	A-3

PHOTO COUPLER	
PC6480	B-4
PC6701	A-4
PC6702	A-4
PC6703	A-4
PC6704	I-4
PC6705	C-4
PC6760	I-4
PC6861	B-4
PC6871	A-2

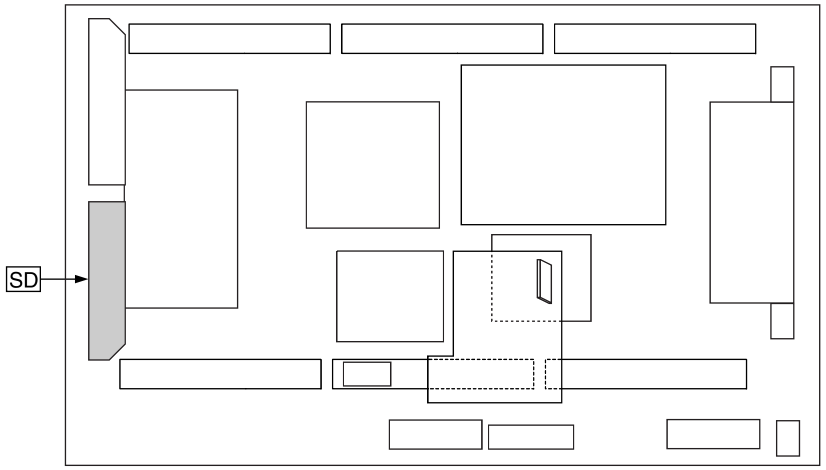
TRANSISTOR	
Q6401	D-4
Q6402	E-4
Q6403	E-4
Q6421	G-4
Q6422	H-4
Q6423	H-4
Q6441	E-2
Q6442	F-2
Q6443	F-2
Q6451	F-2
Q6452	F-2
Q6453	G-2
Q6471	B-3
Q6511	F-4
Q6512	E-4
Q6516	G-4
Q6517	G-4
Q6531	E-2
Q6532	F-2
Q6551	F-2
Q6552	F-2
Q6581	E-2
Q6601	C-5
Q6602	C-4
Q6621	B-4
Q6622	G-4
Q6641	F-5
Q6642	F-5
Q6643	G-5
Q6644	G-5
Q6645	G-5
Q6646	H-5
Q6647	H-5
Q6648	H-5
Q6661	D-4
Q6662	E-5
Q6663	E-4
Q6671	D-4
Q6672	D-4
Q6673	D-4
Q6680	D-4
Q6681	D-4
Q6682	D-5
Q6691	D-5
Q6742	A-4
Q6743	B-5
Q6744	A-4
Q6762	H-4
Q6781	E-5
Q6782	E-5
Q6791	A-3
Q6803	C-3
Q6804	B-2
Q6821	G-4
Q6822	B-4
Q6824	C-4
Q6841	B-3
Q6842	B-3

TP	
TP15V	I-3
TPSC1	D-5
TPSOS6	B-2
TPSOS7	B-3
TPVAD	B-2
TPVSCN	B-3
TPVSET	C-4
TPVSET2	B-3
TPVSUS	H-2

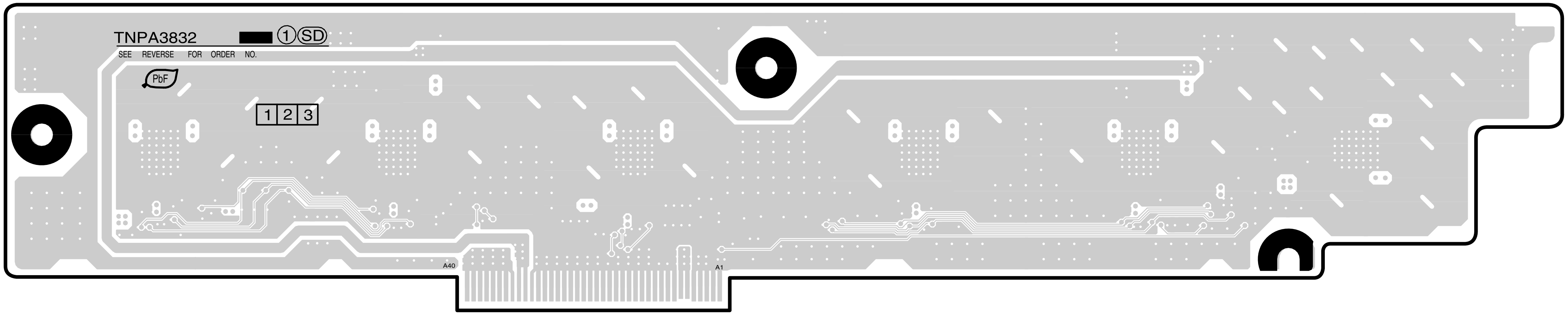
VOLUME	
VR6600	C-3
VR6601	B-4
VR6602	E-4

Parts Location

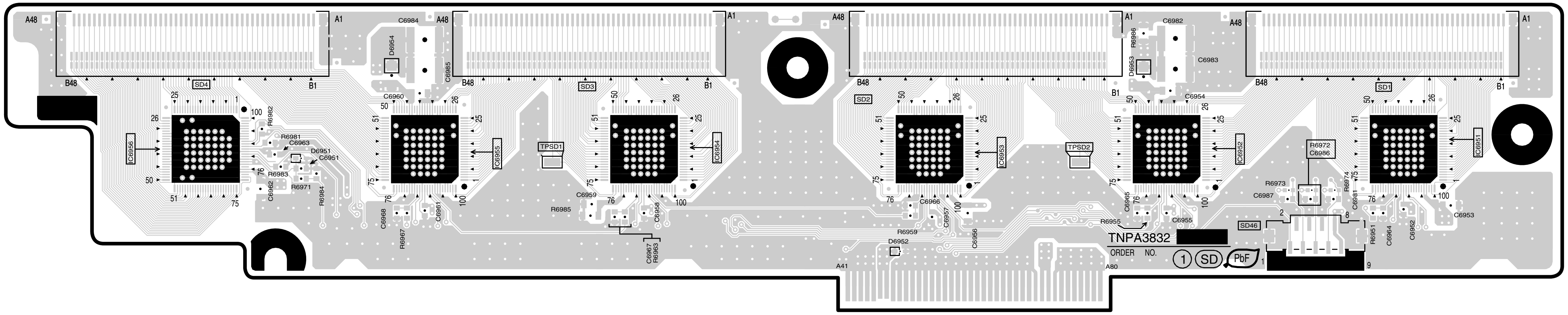
SD-BOARD	
IC	
IC6951	H-2
IC6952	G-2
IC6953	F-2
IC6954	D-2
IC6955	C-2
IC6956	B-2

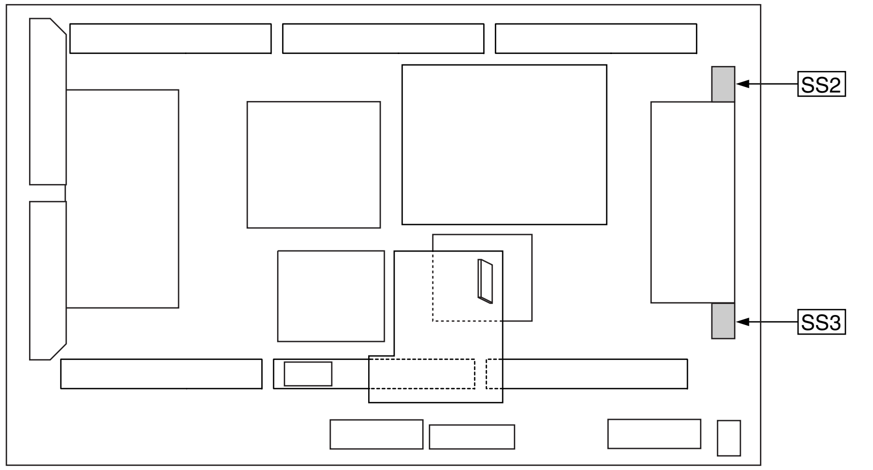


SD-BOARD (FOIL SIDE)
TNPA3832

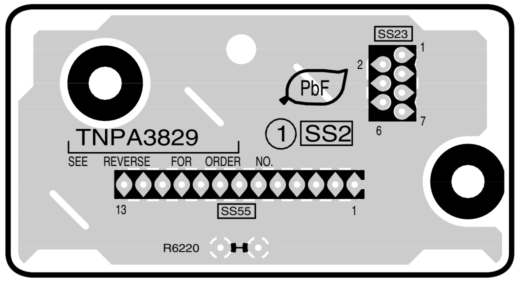

TNPA3832
① SD
SEE REVERSE FOR ORDER NO.
PbF
1 2 3
A40
A1

SD-BOARD (COMPONENT SIDE)
TNPA3832

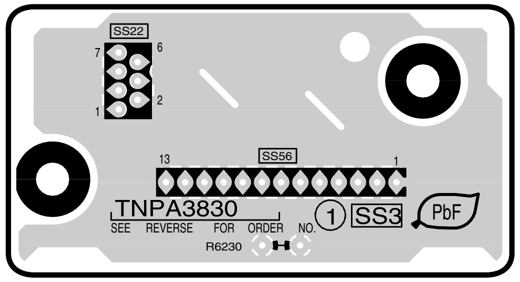

A48
A1
B48
B1
SD4
SD3
SD2
SD1
SD46
IC6956
IC6955
IC6954
IC6953
IC6952
IC6951
TPSD1
TPSD2
C6984
D6954
C6985
C6960
C6982
R6986
D6953
C6983
C6954
R6981
C6963
D6951
C6951
R6982
R6983
C6962
R6971
R6984
C6968
R6967
C6961
C6959
R6985
C6958
C6967
R6963
C6966
R6959
C6957
C6956
D6952
C6965
R6955
C6955
R6972
C6986
R6973
C6987
R6974
C6981
R6951
C6964
C6952
C6953
TNPA3832
ORDER NO.
① SD
PbF
A41
A80
1
2
8
9
25
26
50
51
75
76
100



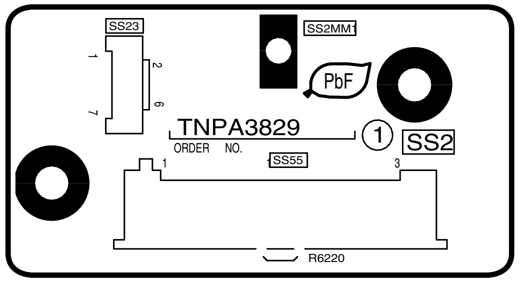
SS2-BOARD (FOIL SIDE)
TNPA3829


SS23
1
2
6
7
PbF
TNPA3829
① SS2
SEE REVERSE FOR ORDER NO.
13
SS55
1
R6220

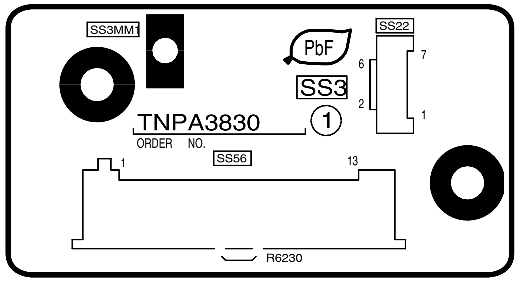
SS3-BOARD (FOIL SIDE)
TNPA3830


SS22
7
6
2
1
13
SS56
1
TNPA3830
SEE REVERSE FOR ORDER NO.
① SS3
PbF
R6230

SS2-BOARD (COMPONENT SIDE)
TNPA3829


SS23
1
2
6
7
SS2MM1
PbF
TNPA3829
ORDER NO.
① SS2
1
SS55
3
R6220

SS3-BOARD (COMPONENT SIDE)
TNPA3830

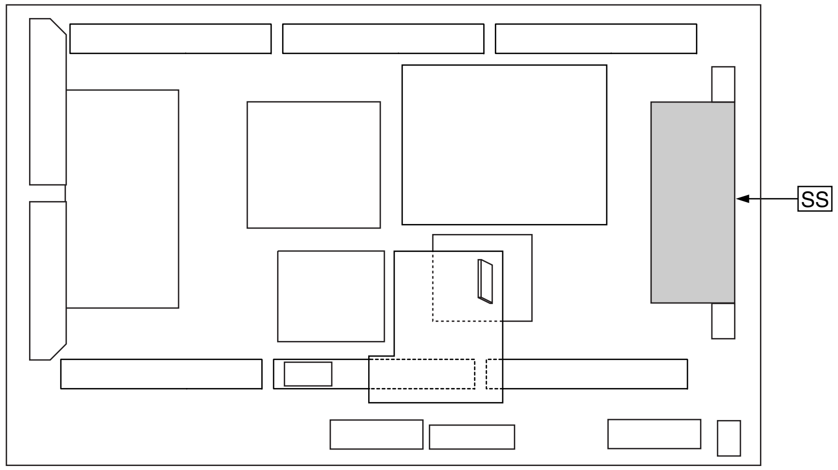

SS3MM1
PbF
SS3
SS22
6
7
2
1
TNPA3830
ORDER NO.
①
1
SS56
13
R6230

TH-50PV60A
SS2-BOARD TNPA3829
SS3-BOARD TNPA3830

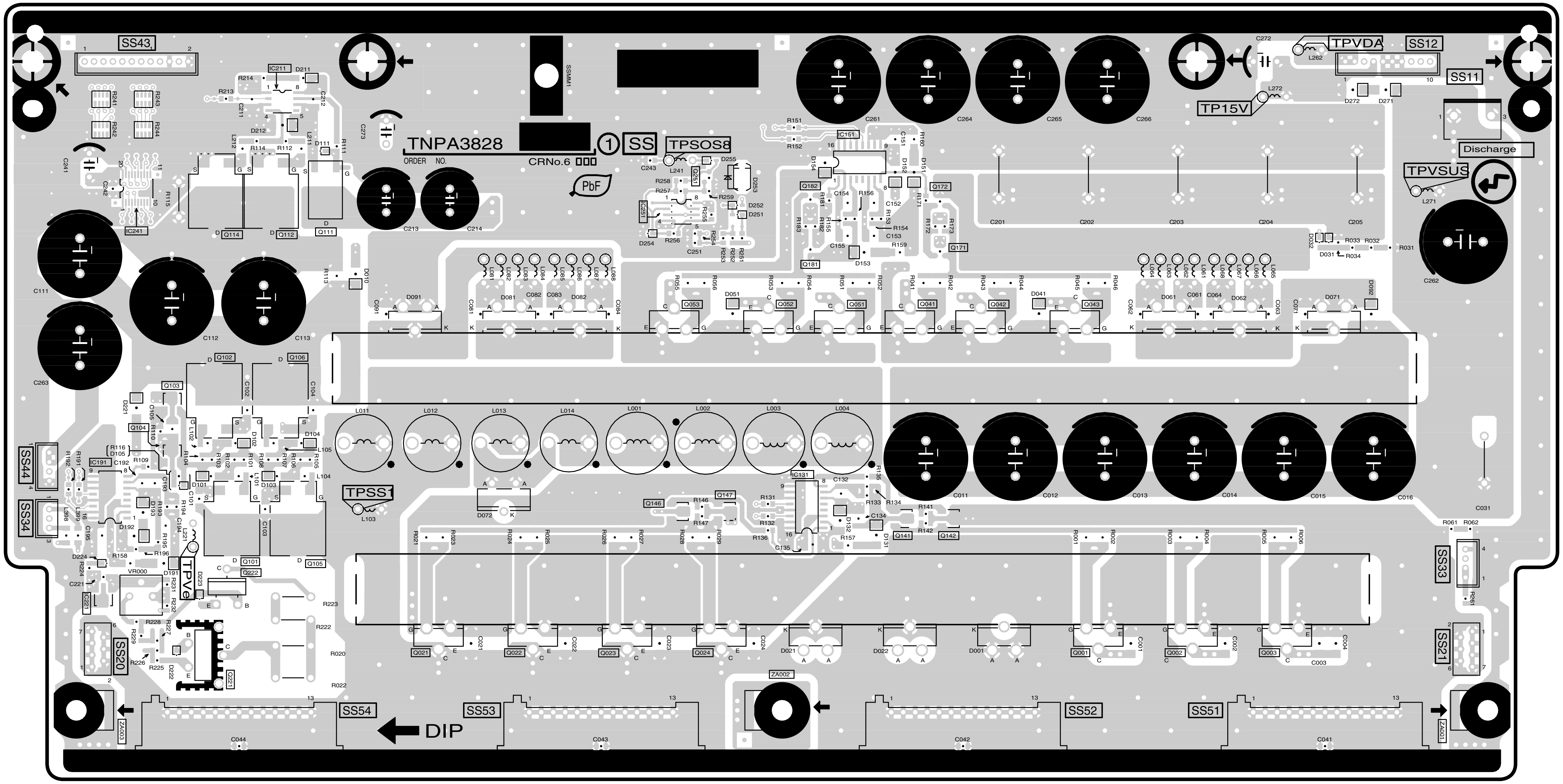
TH-50PV60A
SS2-BOARD TNPA3829
SS3-BOARD TNPA3830

Parts Location

SS-BOARD (COMPONENT SIDE)	
IC	
IC6131	E-2
IC6151	E-4
IC6191	A-2
IC6211	B-4
IC6221	A-2
IC6241	B-4
IC6251	D-4
TRANSISTOR	
Q6001	F-1
Q6002	G-1
Q6003	G-1
Q6021	C-1
Q6022	C-1
Q6023	D-1
Q6024	D-1
Q6041	F-3
Q6042	F-3
Q6043	F-3
Q6051	E-3
Q6052	E-3
Q6053	D-3
Q6101	B-2
Q6102	B-3
Q6103	B-3
Q6104	B-3
Q6105	C-2
Q6106	B-3
Q6111	C-4
Q6112	B-4
Q6114	B-4
Q6141	E-2
Q6142	F-2
Q6146	D-2
Q6147	E-2
Q6171	F-3
Q6182	E-4
Q6221	B-1
Q6222	B-2
Q6251	D-4
TP	
TP15V	G-4
TP34	G-4
TPSOS8	D-4
TPSS1	C-2
TPVDA	H-4
TPVe	B-2
TPVSUS	H-4
VOLUME	
VR6000	B-2



SS-BOARD (COMPONENT SIDE)
TNPA3828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TNPA3828
ORDER NO.
CRNo.6
SS
PbF
TPSOS8
TPVDA
SS12
SS11
TP15V
Discharge
TPVSUS
SS44
SS34
TPSS1
TPVe
SS20
SS33
SS21
SS54
SS53
SS52
SS51
DIP
ZA002
ZA003
ZA001
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3
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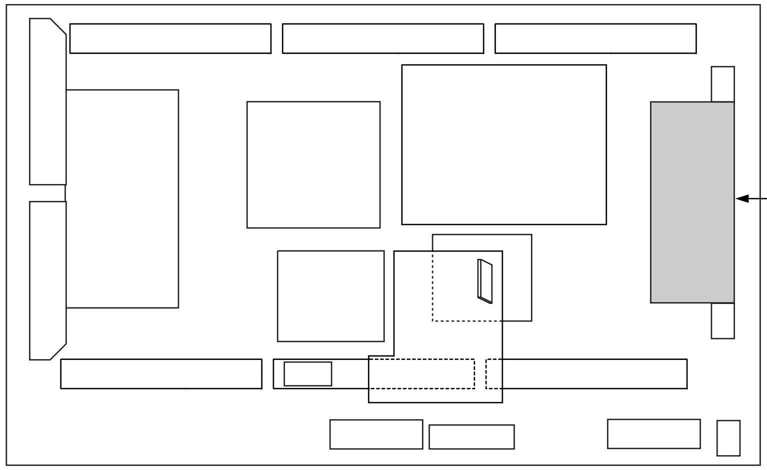
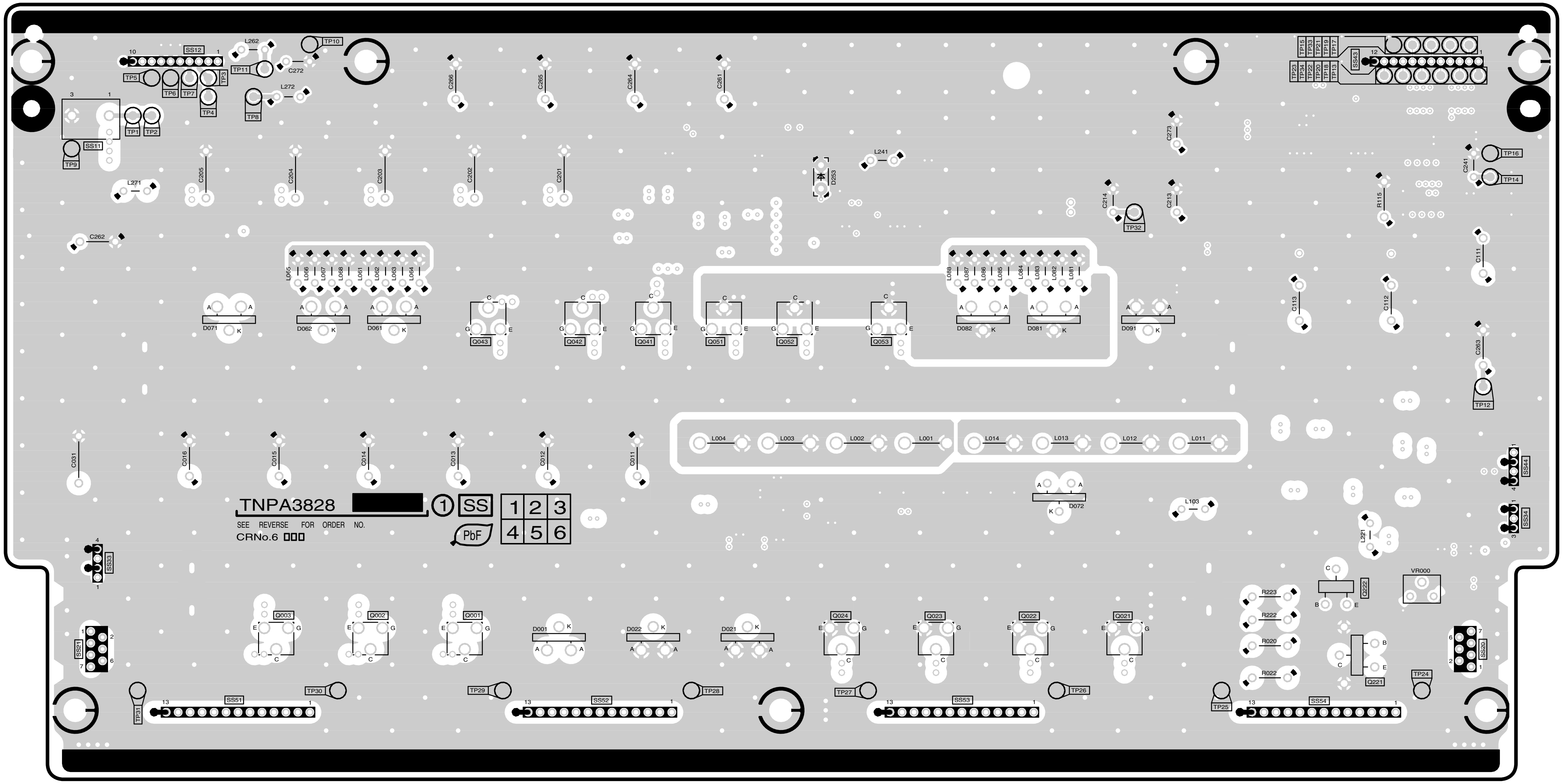
I

Parts Location

SS-BOARD (FOIL SIDE)					
TRANSISTOR		**TP**		TP19	H-4
Q6001	C-2	TP1	B-4	TP20	H-4
Q6002	C-2	TP2	B-4	TP21	H-4
Q6003	C-2	TP3	B-4	TP22	G-4
Q6021	G-2	TP4	B-4	TP23	G-4
Q6022	F-2	TP5	B-4	TP24	H-1
Q6023	F-2	TP6	B-4	TP25	G-1
Q6024	E-2	TP7	B-4	TP26	F-1
Q6041	D-3	TP8	B-4	TP27	E-1
Q6042	D-3	TP9	A-4	TP28	D-1
Q6043	C-3	TP10	C-5	TP29	C-1
Q6051	E-3	TP11	B-4	TP30	C-1
Q6052	E-3	TP12	H-3	TP31	B-1
Q6053	E-3	TP13	H-4	TP32	G-4
Q6221	H-1	TP14	H-4	TP33	H-4
Q6222	H-2	TP15	G-4	**VOLUME**	
		TP16	H-4	VR6000	H-2
		TP17	H-4		
		TP18	H-4		



SS-BOARD (FOIL SIDE)
TNPA3828


TNPA3828
①
SS
1 2 3
4 5 6
SEE REVERSE FOR ORDER NO.
CRNo.6
PbF
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SS44
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SS20
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SS52
SS53
SS54
TP1
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C273
C214
C213
C241
C111
C113
C112
C263
C031
C016
C015
C014
C013
C012
C011
D253
R115
D071
D062
D061
D082
D081
D091
D072
Q043
Q042
Q041
Q051
Q052
Q053
Q003
Q002
Q001
Q024
Q023
Q022
Q021
Q222
Q221
D001
D022
D021
R223
R222
R020
R022
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L085
L084
L083
L082
L081
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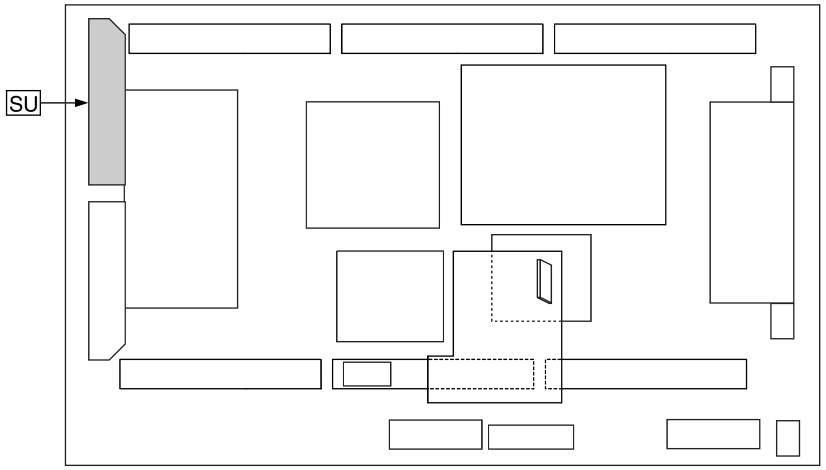
A B C D E F G H I

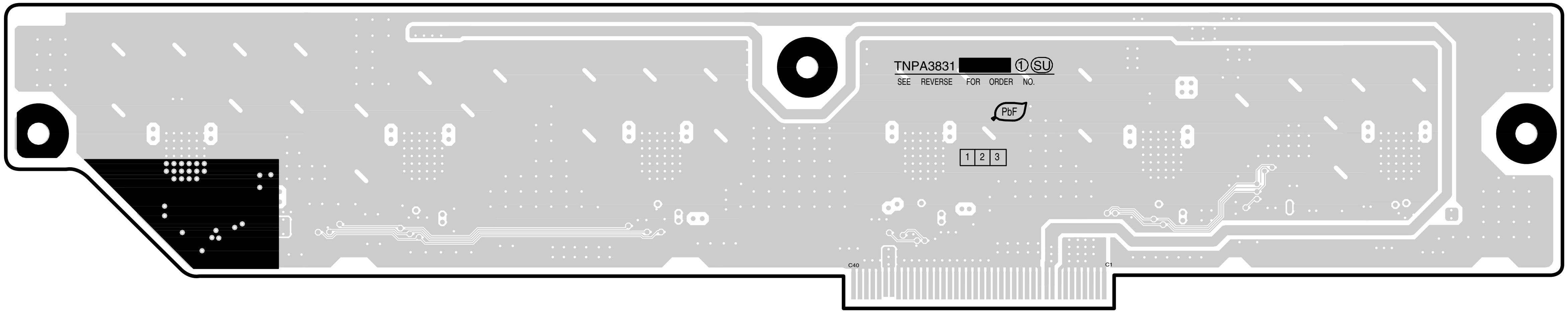
TH-50PV60A
SS-BOARD TNPA3828

Parts Location

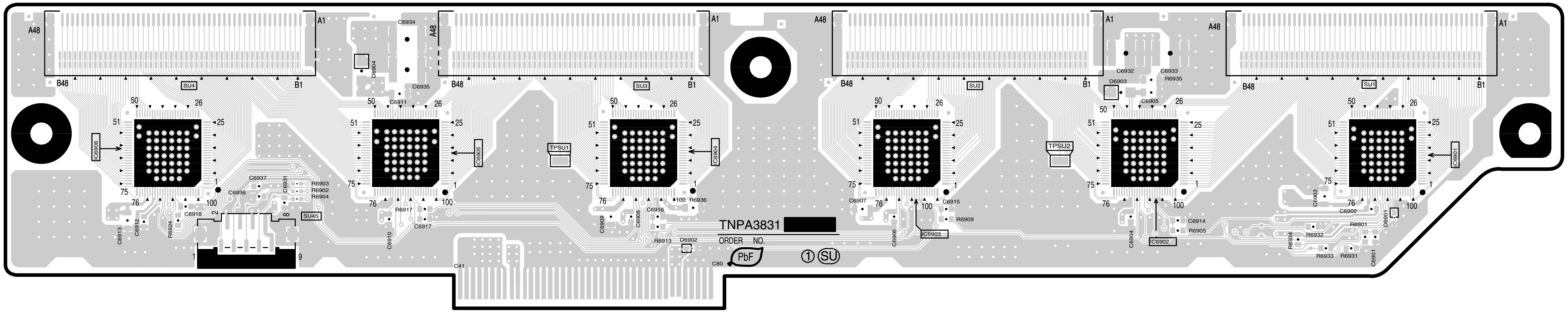
SU-BOARD	
IC	
IC6901	H-2
IC6902	G-2
IC6903	F-2
IC6904	D-2
IC6905	C-2
IC6906	B-2



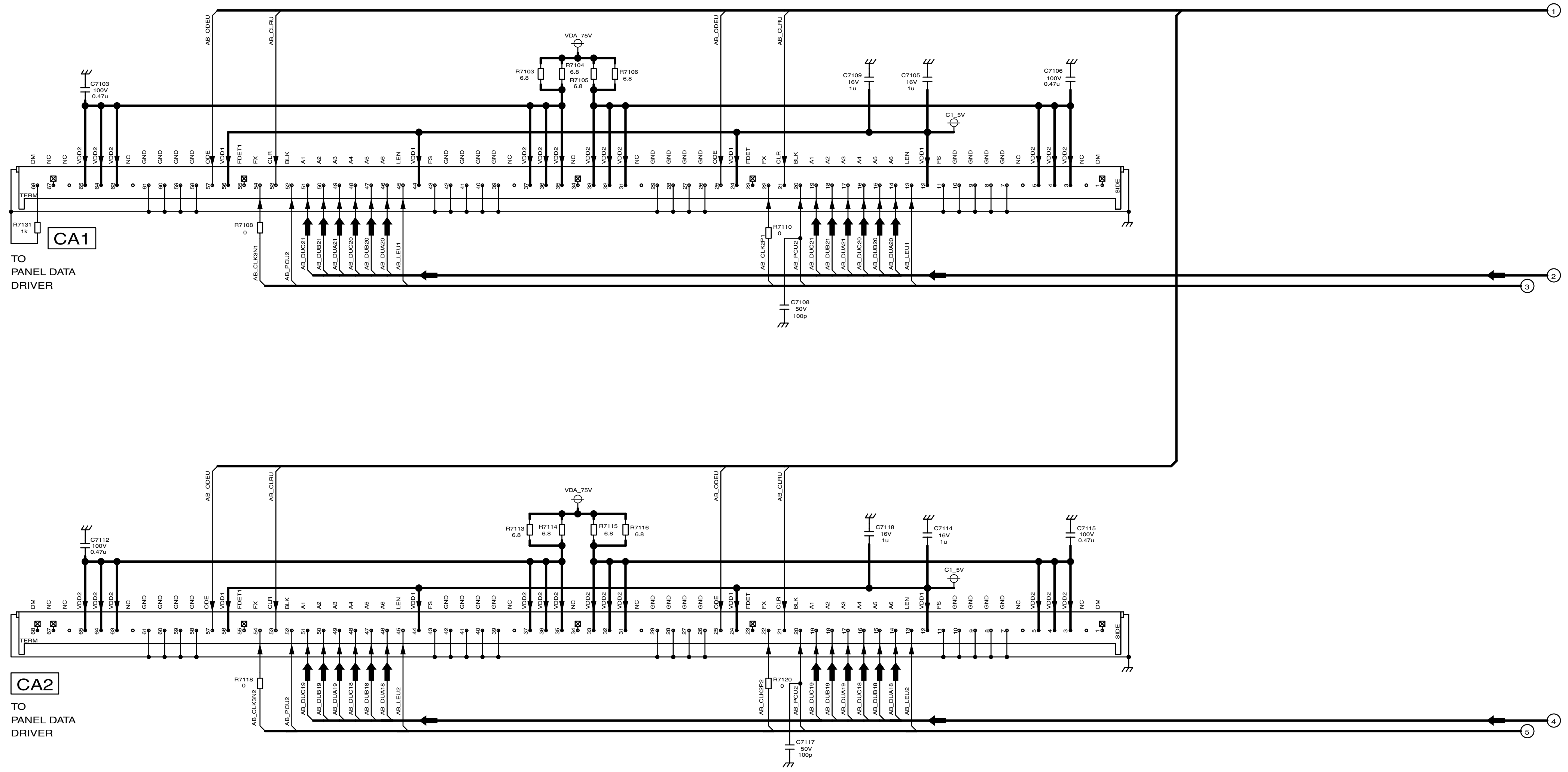
SU-BOARD (FOIL SIDE)
TNPA3831


TNPA3831 [redacted] ① SU
SEE REVERSE FOR ORDER NO.
PbF
1 2 3
C40
C1

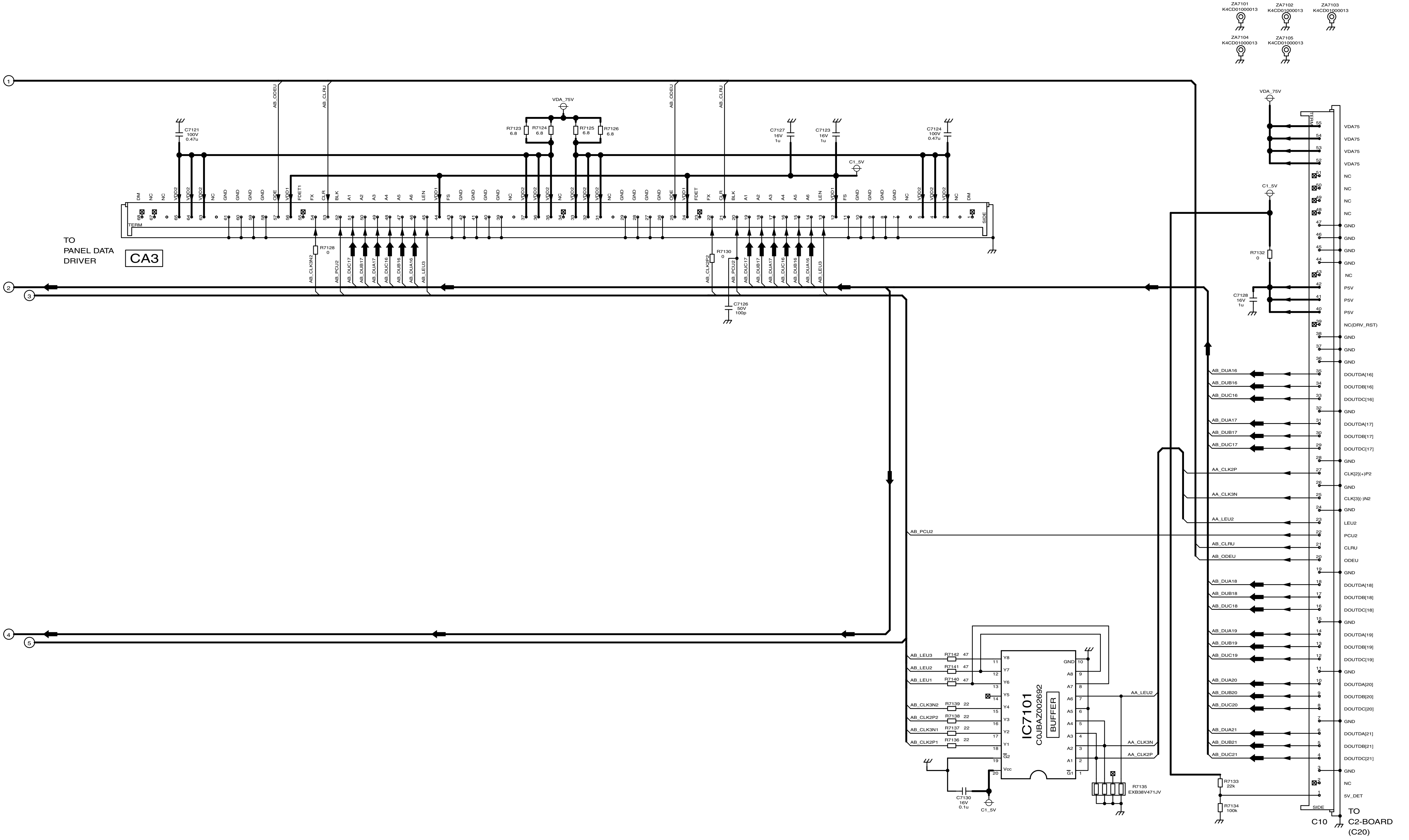
SU-BOARD (COMPONENT SIDE)
TNPA3831


A48
A1
B48
B1
SU4
SU3
SU2
SU1
SU45
C6934
D6904
C6935
C6911
C6932
C6933
D6903
R6935
C6905
TPSU1
TPSU2
C6906
C6905
C6904
C6901
50
26
51
25
75
1
76
100
C6937
C6936
C6918
R6903
R6902
R6904
C6913
C6912
R6924
C6910
R6917
C6917
C6909
C6908
C6916
R6913
R6936
D6902
C6907
C6915
C6906
IC6903
R6909
C6904
C6914
R6905
IC6902
C6903
C6902
R6901
D6901
R6934
R6932
R6933
R6931
C6901
TNPA3831 [redacted]
ORDER NO.
PbF
① SU
C41
C80
1
9
8
2

⚠ C1-BOARD TNPA3821 (1/2)


VDA_75V
R7103 6.8
R7104 6.8
R7105 6.8
R7106 6.8
C7103 100V 0.47u
C7109 16V 1u
C7105 16V 1u
C7106 100V 0.47u
C1_5V
AB_ODEU
AB_CLRU
R7131 1k
R7108 0
R7110 0
C7108 50V 100p
CA1
TO PANEL DATA DRIVER
AB_CLK3N1
AB_PCU2
AB_DUC21
AB_DUB21
AB_DUA21
AB_DUC20
AB_DUB20
AB_DUA20
AB_LEU1
AB_CLK2P1
R7113 6.8
R7114 6.8
R7115 6.8
R7116 6.8
C7112 100V 0.47u
C7118 16V 1u
C7114 16V 1u
C7115 100V 0.47u
R7118 0
R7120 0
C7117 50V 100p
CA2
TO PANEL DATA DRIVER
AB_CLK3N2
AB_DUC19
AB_DUB19
AB_DUA19
AB_DUC18
AB_DUB18
AB_DUA18
AB_LEU2
AB_CLK2P2
TERM
SIDE
①
②
③
④
⑤

⚠ C1-BOARD TNPA3821 (2/2)

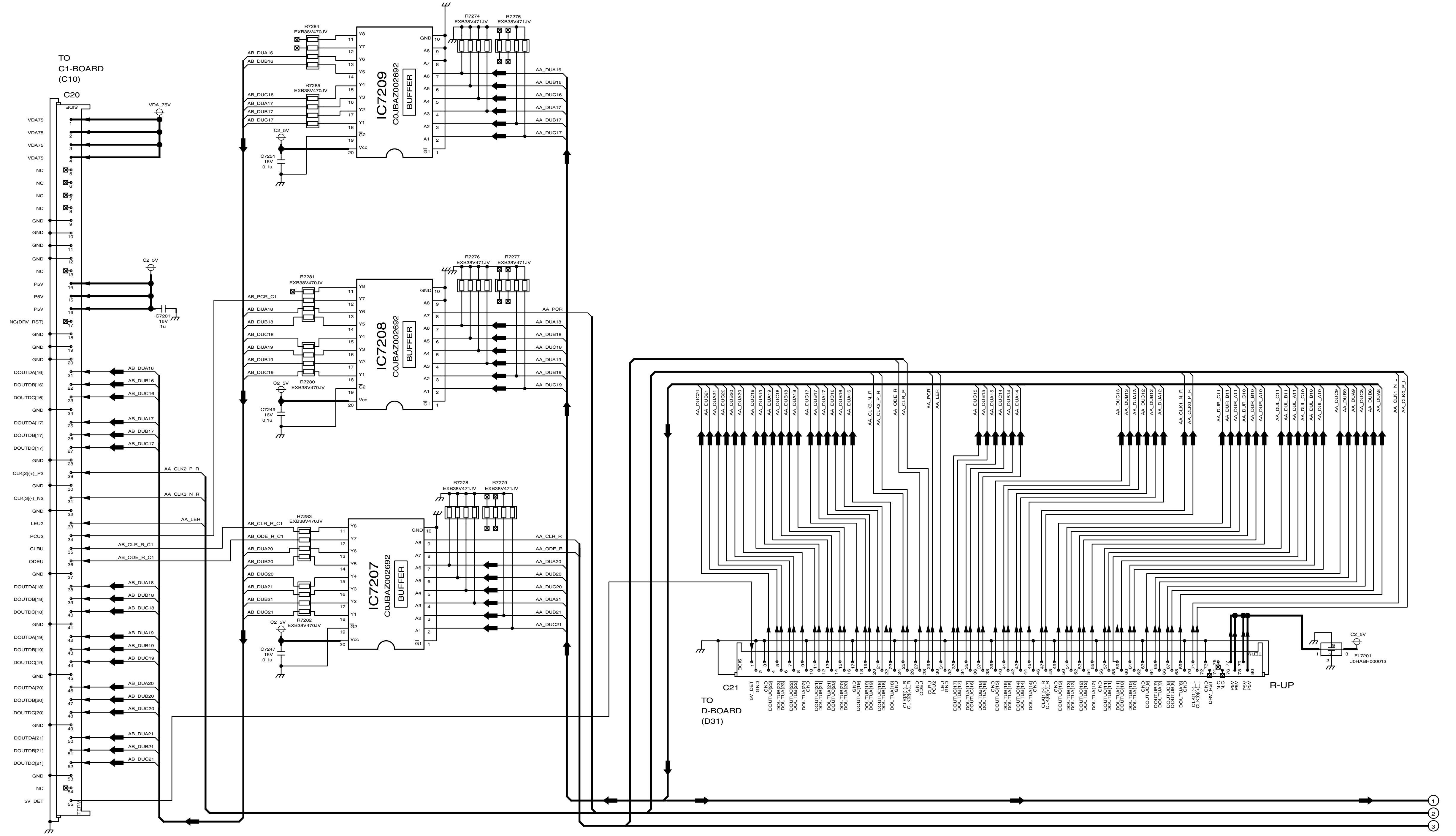

ZA7101 K4CD01000013
ZA7102 K4CD01000013
ZA7103 K4CD01000013
ZA7104 K4CD01000013
ZA7105 K4CD01000013
VDA_75V
C1_5V
C7121 100V 0.47u
R7123 6.8
R7124 6.8
R7125 6.8
R7126 6.8
C7127 16V 1u
C7123 16V 1u
C7124 100V 0.47u
AB_ODEU
AB_CLRU
DM NC NC VDD2 VDD2 VDD2 NC GND GND GND GND ODE VDD1 FDET1 FX CLR BLK A1 A2 A3 A4 A5 A6 LEN VDD1 FS GND GND GND GND NC VDD2 VDD2 VDD2 NC VDD2 VDD2 VDD2 NC GND GND GND GND ODE VDD1 FDET FX CLR BLK A1 A2 A3 A4 A5 A6 LEN VDD1 FS GND GND GND GND NC VDD2 VDD2 NC DM
TERM
SIDE
TO PANEL DATA DRIVER
CA3
R7128 0
R7130 0
C7126 50V 100p
AB_CLK3N2 AB_PCU2 AB_DUC17 AB_DUB17 AB_DUA17 AB_DUC16 AB_DUB16 AB_DUA16 AB_LEU3
AB_CLK2P2 AB_PCU2 AB_DUC17 AB_DUB17 AB_DUA17 AB_DUC16 AB_DUB16 AB_DUA16 AB_LEU3
①
②
③
④
⑤
AB_PCU2
R7132 0
C7128 16V 1u
AB_DUA16 AB_DUB16 AB_DUC16 AB_DUA17 AB_DUB17 AB_DUC17
AA_CLK2P AA_CLK3N AA_LEU2 AB_CLRU AB_ODEU
AB_DUA18 AB_DUB18 AB_DUC18 AB_DUA19 AB_DUB19 AB_DUC19 AB_DUA20 AB_DUB20 AB_DUC20 AB_DUA21 AB_DUB21 AB_DUC21
55 VDA75
54 VDA75
53 VDA75
52 VDA75
51 NC
50 NC
49 NC
48 NC
47 GND
46 GND
45 GND
44 GND
43 NC
42 P5V
41 P5V
40 P5V
39 NC(DRV_RST)
38 GND
37 GND
36 GND
35 DOUTDA[16]
34 DOUTDB[16]
33 DOUTDC[16]
32 GND
31 DOUTDA[17]
30 DOUTDB[17]
29 DOUTDC[17]
28 GND
27 CLK[2](+)P2
26 GND
25 CLK[3](-)N2
24 GND
23 LEU2
22 PCU2
21 CLRU
20 ODEU
19 GND
18 DOUTDA[18]
17 DOUTDB[18]
16 DOUTDC[18]
15 GND
14 DOUTDA[19]
13 DOUTDB[19]
12 DOUTDC[19]
11 GND
10 DOUTDA[20]
9 DOUTDB[20]
8 DOUTDC[20]
7 GND
6 DOUTDA[21]
5 DOUTDB[21]
4 DOUTDC[21]
3 GND
2 NC
1 5V_DET
TERM
SIDE
C10
TO C2-BOARD (C20)
R7133 22k
R7134 100k
AB_LEU3 R7142 47
AB_LEU2 R7141 47
AB_LEU1 R7140 47
AB_CLK3N2 R7139 22
AB_CLK2P2 R7138 22
AB_CLK3N1 R7137 22
AB_CLK2P1 R7136 22
IC7101
C0JBAZ002692
BUFFER
Y8 Y7 Y6 Y5 Y4 Y3 Y2 Y1 G2 Vcc
GND A8 A7 A6 A5 A4 A3 A2 A1 G1
AA_LEU2
AA_CLK3N
AA_CLK2P
C7130 16V 0.1u
C1_5V
R7135 EXB38V471JV

TH-50PV60A
C1-Board (2 of 2) Schematic Diagram

TH-50PV60A
C1-Board (2 of 2) Schematic Diagram

8 9 10 11 12 13 14 15

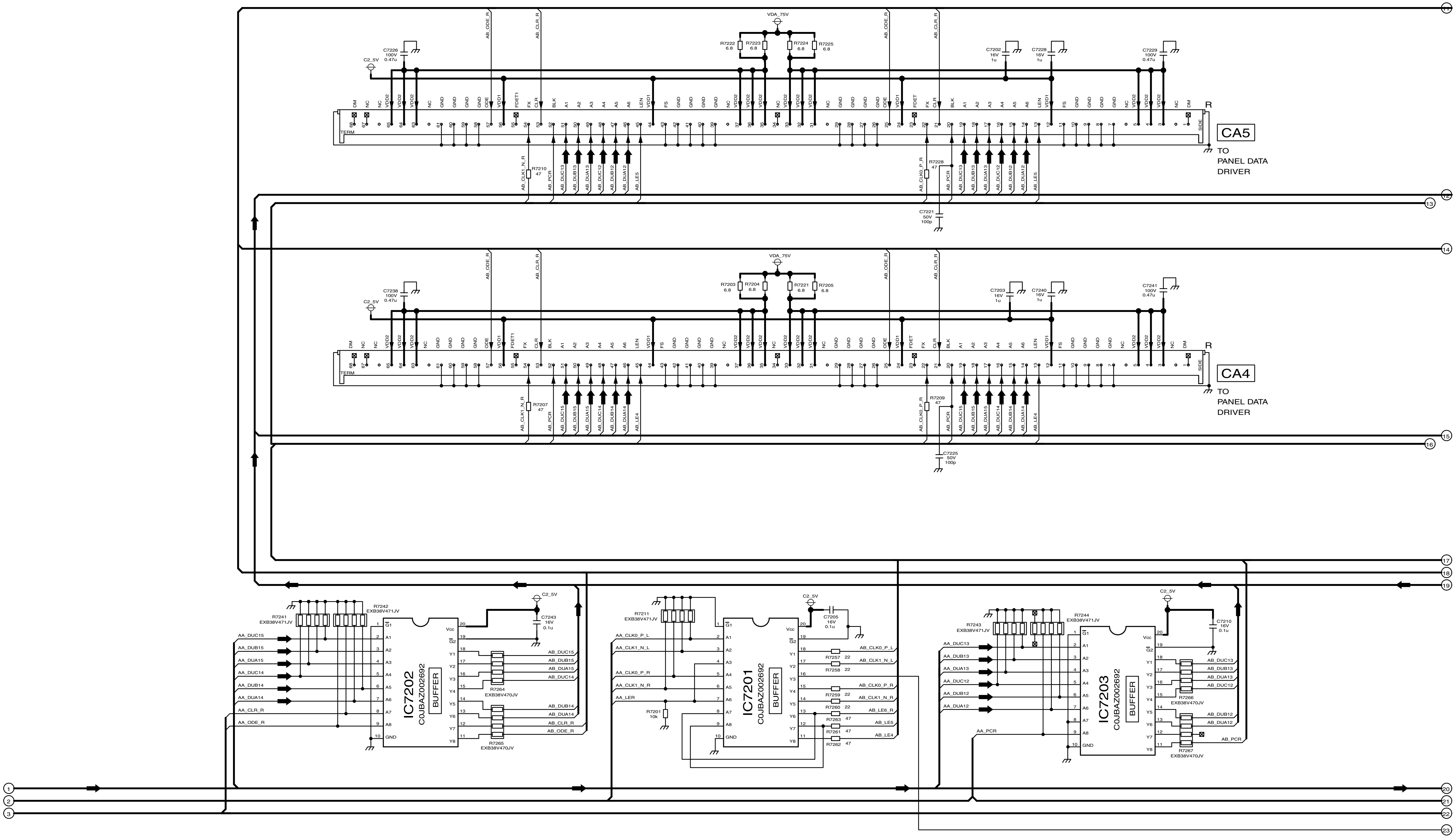
C2-BOARD TNPA3822 (1/3)



TO
C1-BOARD
(C10)
C20
VDA_75V
C2_5V
C7201
16V
1u
R7284
EXB38V470JV
R7285
EXB38V470JV
R7274
EXB38V471JV
R7275
EXB38V471JV
IC7209
C0JBAZ002692
BUFFER
C7251
16V
0.1u
R7281
EXB38V470JV
R7280
EXB38V470JV
R7276
EXB38V471JV
R7277
EXB38V471JV
IC7208
C0JBAZ002692
BUFFER
C7249
16V
0.1u
R7283
EXB38V470JV
R7282
EXB38V470JV
R7278
EXB38V471JV
R7279
EXB38V471JV
IC7207
C0JBAZ002692
BUFFER
C7247
16V
0.1u
C21
TO
D-BOARD
(D31)
R-UP
FL7201
J0HABH000013

TH-50PV60A
C2-Board (1 of 3) Schematic Diagram

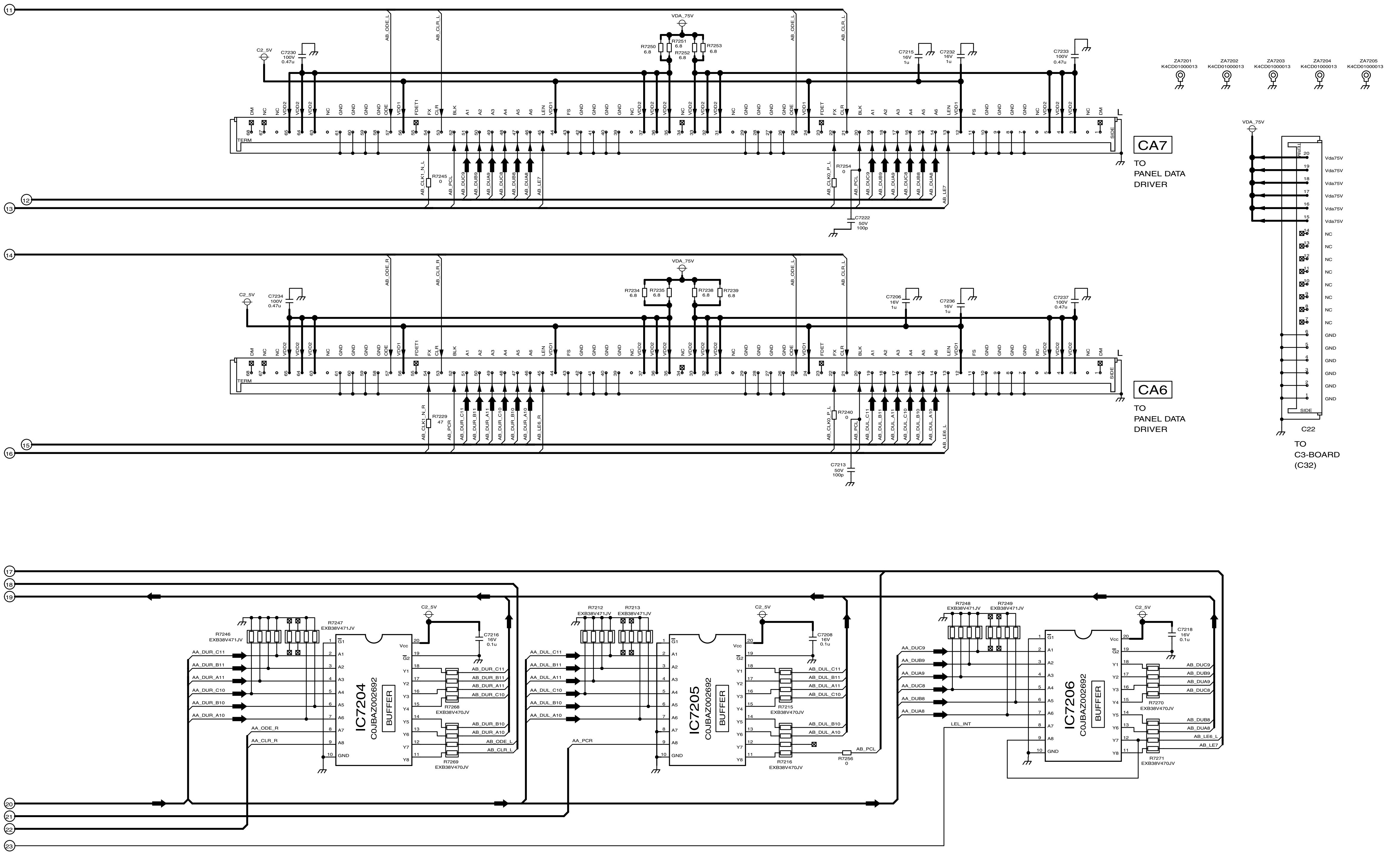
⚠ C2-BOARD TNPA3822 (2/3)


VDA_75V
C2_5V
AB_ODE_R
AB_CLR_R
C7226 100V 0.47u
R7222 6.8
R7223 6.8
R7224 6.8
R7225 6.8
C7202 16V 1u
C7228 16V 1u
C7229 100V 0.47u
TERM
SIDE
R
CA5
TO PANEL DATA DRIVER
R7210 47
R7228 47
AB_CLK1_N_R
AB_CLK0_P_R
AB_PCR
AB_DUC13
AB_DUB13
AB_DUA13
AB_DUC12
AB_DUB12
AB_DUA12
AB_LE5
C7221 50V 100p
C7238 100V 0.47u
R7203 6.8
R7204 6.8
R7221 6.8
R7205 6.8
C7203 16V 1u
C7240 16V 1u
C7241 100V 0.47u
CA4
TO PANEL DATA DRIVER
R7207 47
R7209 47
AB_DUC15
AB_DUB15
AB_DUA15
AB_DUC14
AB_DUB14
AB_DUA14
AB_LE4
C7225 50V 100p
DM
NC
VDD2
VDD1
GND
ODE
FDET
FDET1
FX
CLR
BLK
A1
A2
A3
A4
A5
A6
LEN
FS
R7241 EXB38V471JV
R7242 EXB38V471JV
C7243 16V 0.1u
AA_DUC15
AA_DUB15
AA_DUA15
AA_DUC14
AA_DUB14
AA_DUA14
AA_CLR_R
AA_ODE_R
IC7202
C0JBAZ002692
BUFFER
R7264 EXB38V470JV
R7265 EXB38V470JV
AB_CLR_R
AB_ODE_R
R7211 EXB38V471JV
C7205 16V 0.1u
AA_CLK0_P_L
AA_CLK1_N_L
AA_CLK0_P_R
AA_CLK1_N_R
AA_LER
R7201 10k
IC7201
C0JBAZ002692
BUFFER
R7257 22
R7258 22
R7259 22
R7260 22
R7263 47
R7261 47
R7262 47
AB_CLK0_P_L
AB_CLK1_N_L
AB_CLK0_P_R
AB_CLK1_N_R
AB_LE6_R
AB_LE5
AB_LE4
R7243 EXB38V471JV
R7244 EXB38V471JV
C7210 16V 0.1u
AA_DUC13
AA_DUB13
AA_DUA13
AA_DUC12
AA_DUB12
AA_DUA12
AA_PCR
IC7203
C0JBAZ002692
BUFFER
R7266 EXB38V470JV
R7267 EXB38V470JV
AB_PCR
G1
G2
Vcc
GND
Y1
Y2
Y3
Y4
Y5
Y6
Y7
Y8
A7
A8
1
2
3
11
12
13
14
15
16
17
18
19
20
21
22
23

TH-50PV60A
C2-Board (2 of 3) Schematic Diagram

TH-50PV60A
C2-Board (2 of 3) Schematic Diagram

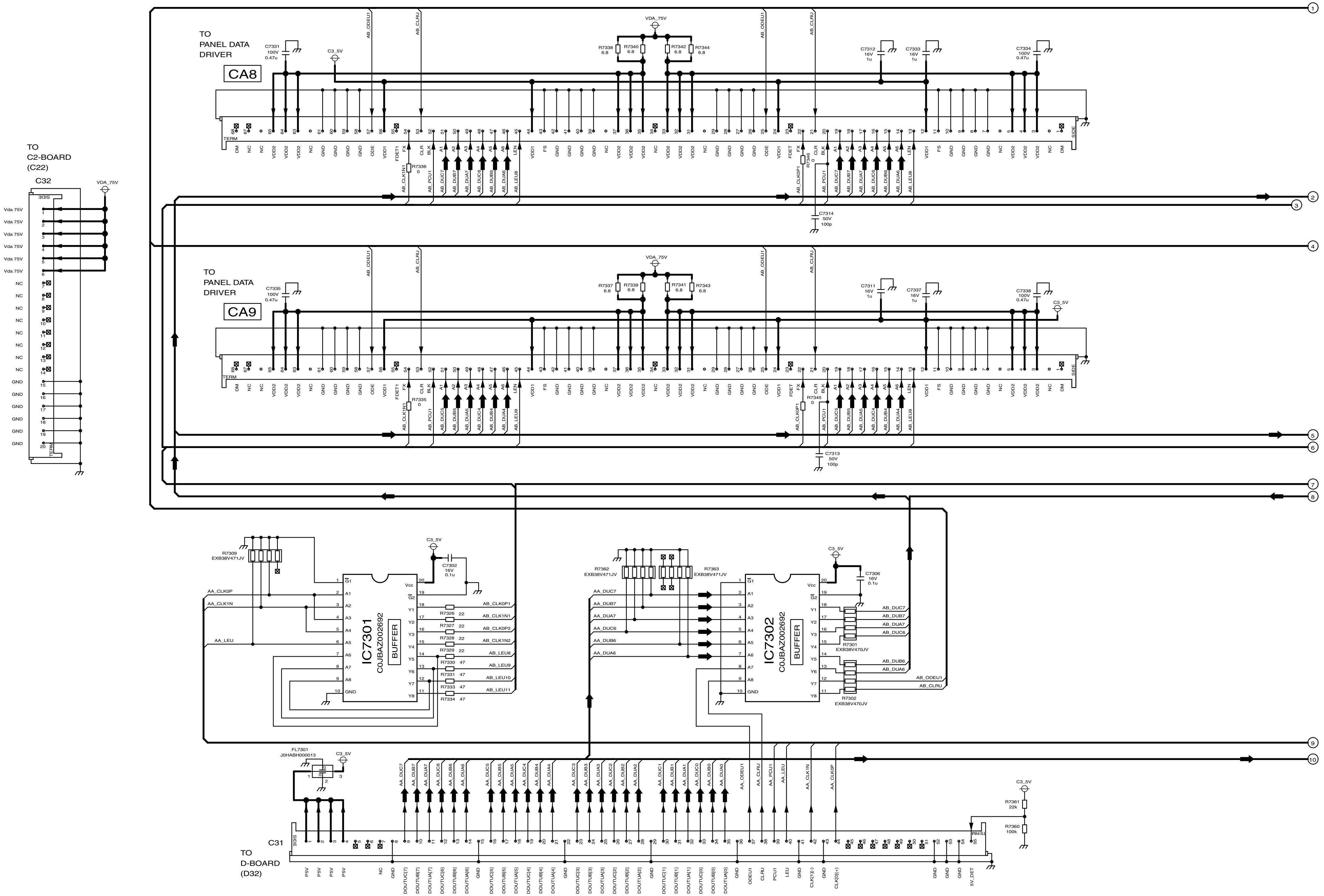
⚠ C2-BOARD TNPA3822 (3/3)


CA7
TO
PANEL DATA
DRIVER
CA6
TO
PANEL DATA
DRIVER
C22
TO
C3-BOARD
(C32)
VDA_75V
C2_5V
ZA7201
ZA7202
ZA7203
ZA7204
ZA7205
K4CD01000013
IC7204
C0JBAZ002692
BUFFER
IC7205
C0JBAZ002692
BUFFER
IC7206
C0JBAZ002692
BUFFER
C7230
C7215
C7232
C7233
C7222
C7234
C7206
C7236
C7237
C7213
C7216
C7208
C7218
R7245
R7254
R7229
R7240
R7250
R7251
R7252
R7253
R7234
R7235
R7238
R7239
R7246
R7247
R7268
R7269
R7212
R7213
R7215
R7216
R7256
R7248
R7249
R7270
R7271
EXB38V471JV
EXB38V470JV
AB_ODE_L
AB_CLR_L
AB_ODE_R
AB_CLR_R
AB_CLK1_N_L
AB_CLK0_P_L
AB_CLK1_N_R
AB_PCL
AB_PCR
AB_LE7
AB_LE6_R
AB_LE6_L
AA_DUR_C11
AA_DUR_B11
AA_DUR_A11
AA_DUR_C10
AA_DUR_B10
AA_DUR_A10
AA_ODE_R
AA_CLR_R
AA_DUL_C11
AA_DUL_B11
AA_DUL_A11
AA_DUL_C10
AA_DUL_B10
AA_DUL_A10
AA_PCR
AA_DUC9
AA_DUB9
AA_DUA9
AA_DUC8
AA_DUB8
AA_DUA8
LEL_INT
AB_DUR_C11
AB_DUR_B11
AB_DUR_A11
AB_DUR_C10
AB_DUR_B10
AB_DUR_A10
AB_DUL_C11
AB_DUL_B11
AB_DUL_A11
AB_DUL_C10
AB_DUL_B10
AB_DUL_A10
AB_DUC9
AB_DUB9
AB_DUA9
AB_DUC8
AB_DUB8
AB_DUA8
Vda75V
NC
GND
TERM
SIDE

TH-50PV60A
C2-Board (3 of 3) Schematic Diagram

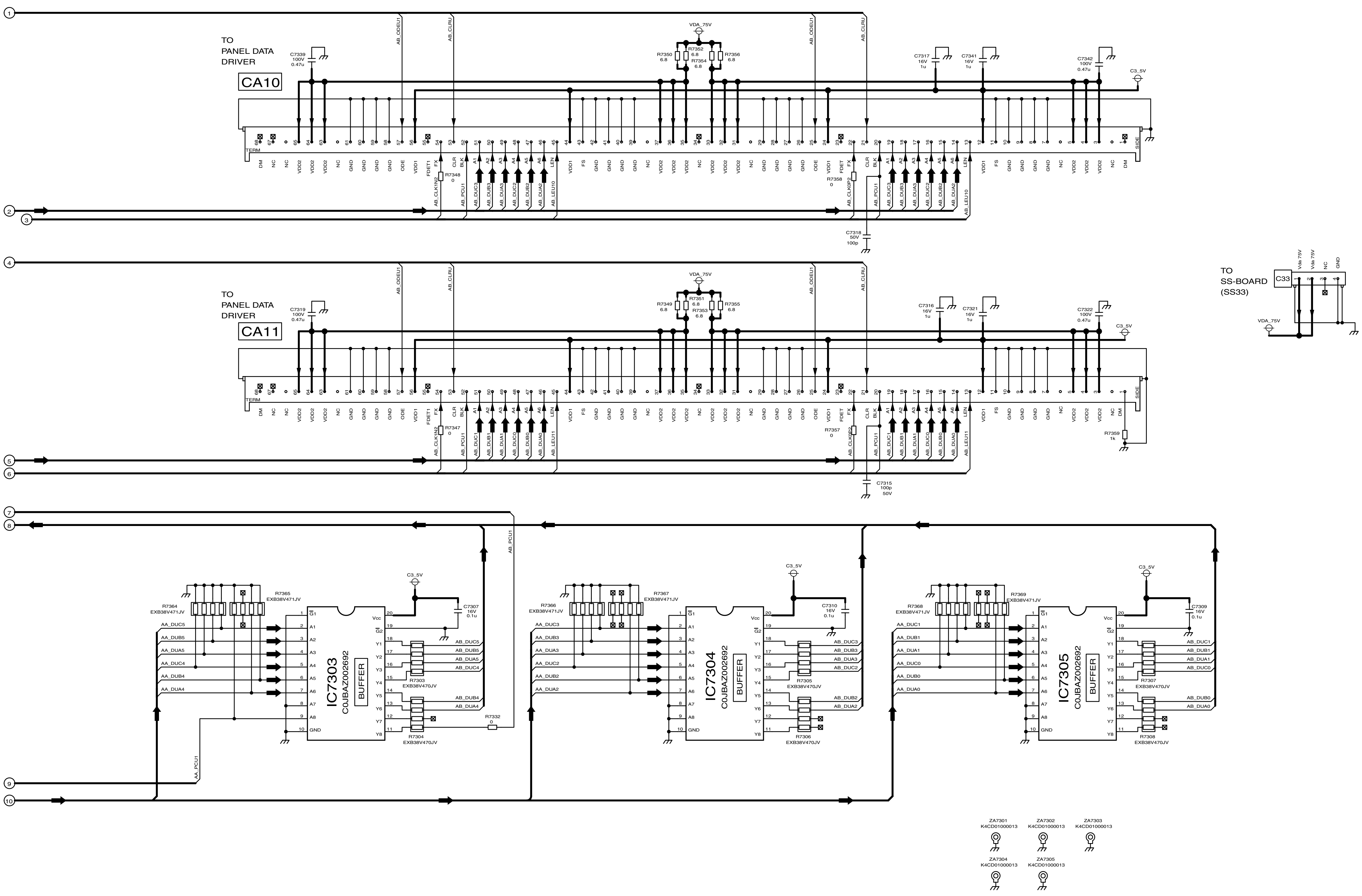
TH-50PV60A
C2-Board (3 of 3) Schematic Diagram

C3-BOARD TNPA3823 (1/2)

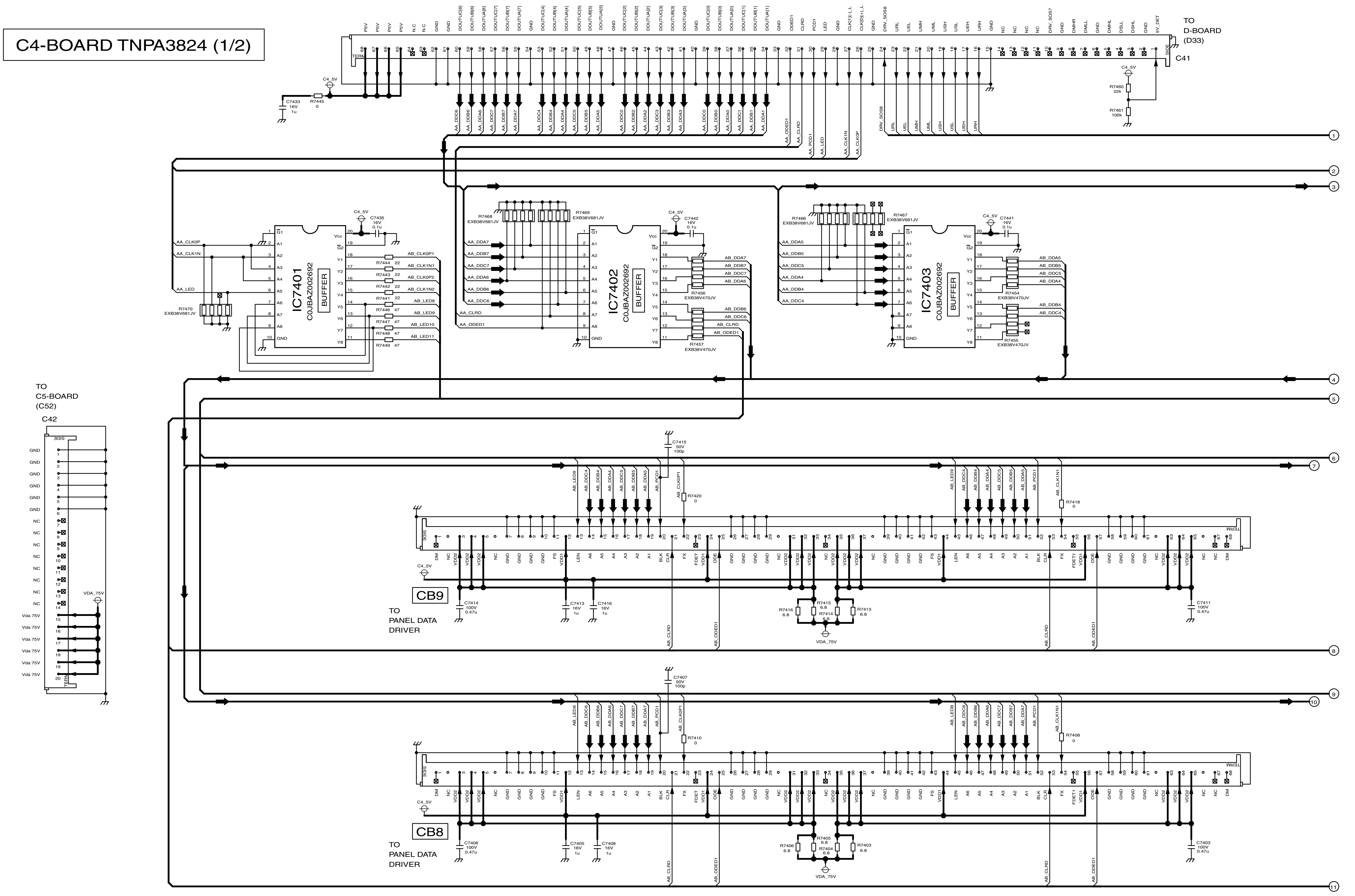

TO
PANEL DATA
DRIVER
CA8
CA9
TO
C2-BOARD
(C22)
C32
VDA_75V
Vda 75V
NC
GND
TERM
SIDE
DM
VDD2
VDD1
FS
ODE
FDET
FX
CLR
BLK
A1
A2
A3
A4
A5
A6
LEN
AB_ODEU1
AB_CLRU
AB_CLK1N1
AB_PCU1
AB_CLK0P1
C3_5V
C7331 100V 0.47u
C7312 16V 1u
C7333 16V 1u
C7334 100V 0.47u
C7335 100V 0.47u
C7311 16V 1u
C7337 16V 1u
C7338 100V 0.47u
C7314 50V 100p
C7313 50V 100p
R7338 6.8
R7340 6.8
R7342 6.8
R7344 6.8
R7337 6.8
R7339 6.8
R7341 6.8
R7343 6.8
R7336 0
R7346 0
R7335 0
R7345 0
IC7301
C0JBAZ002692
BUFFER
IC7302
C0JBAZ002692
BUFFER
R7309 EXB38V471JV
R7362 EXB38V471JV
R7363 EXB38V471JV
R7301 EXB38V470JV
R7302 EXB38V470JV
C7302 16V 0.1u
C7306 16V 0.1u
AA_CLK0P
AA_CLK1N
AA_LEU
AA_DUC7
AA_DUB7
AA_DUA7
AA_DUC6
AA_DUB6
AA_DUA6
R7326 22
R7327 22
R7328 22
R7329 22
R7330 47
R7331 47
R7333 47
R7334 47
AB_CLK0P1
AB_CLK1N1
AB_CLK0P2
AB_CLK1N2
AB_LEU8
AB_LEU9
AB_LEU10
AB_LEU11
AB_DUC7
AB_DUB7
AB_DUA7
AB_DUC6
AB_DUB6
AB_DUA6
AB_ODEU1
AB_CLRU
Vcc
GND
FL7301
J0HABH000013
R7361 22k
R7360 100k
C31
TO
D-BOARD
(D32)
P5V
DOUTUC[7]
DOUTUB[7]
DOUTUA[7]
ODEU1
CLRU
PCU1
LEU
CLK[1](-)
CLK[0](+)
5V_DET
①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩

TH-50PV60A
C3-Board (1 of 2) Schematic Diagram

C3-BOARD TNPA3823 (2/2)


TO
PANEL DATA
DRIVER
CA10
CA11
VDA_75V
C3_5V
AB_ODEU1
AB_CLRU
C7339 100V 0.47u
C7319 100V 0.47u
R7350 6.8
R7352 6.8
R7354 6.8
R7356 6.8
R7349 6.8
R7351 6.8
R7353 6.8
R7355 6.8
C7317 16V 1u
C7341 16V 1u
C7342 100V 0.47u
C7316 16V 1u
C7321 16V 1u
C7322 100V 0.47u
R7348 0
R7358 0
R7347 0
R7357 0
R7359 1k
C7318 50V 100p
C7315 100p 50V
TERM
SIDE
DM
NC
VDD2
GND
ODE
VDD1
FDET1
FDET
FX
CLR
BLK
A1
A2
A3
A4
A5
A6
LEN
FS
AB_CLK1N2
AB_PCU1
AB_DUC3
AB_DUB3
AB_DUA3
AB_DUC2
AB_DUB2
AB_DUA2
AB_LEU10
AB_DUC1
AB_DUB1
AB_DUA1
AB_DUC0
AB_DUB0
AB_DUA0
AB_LEU11
TO
SS-BOARD
(SS33)
C33
Vda 75V
NC
GND
R7364 EXB38V471JV
R7365 EXB38V471JV
R7366 EXB38V471JV
R7367 EXB38V471JV
R7368 EXB38V471JV
R7369 EXB38V471JV
AA_DUC5
AA_DUB5
AA_DUA5
AA_DUC4
AA_DUB4
AA_DUA4
AA_DUC3
AA_DUB3
AA_DUA3
AA_DUC2
AA_DUB2
AA_DUA2
AA_DUC1
AA_DUB1
AA_DUA1
AA_DUC0
AA_DUB0
AA_DUA0
AA_PCU1
IC7303
IC7304
IC7305
C0JBAZ002692
BUFFER
G1
G2
Vcc
GND
Y1
Y2
Y3
Y4
Y5
Y6
Y7
Y8
A7
A8
C7307 16V 0.1u
C7310 16V 0.1u
C7309 16V 0.1u
R7303 EXB38V470JV
R7304 EXB38V470JV
R7305 EXB38V470JV
R7306 EXB38V470JV
R7307 EXB38V470JV
R7308 EXB38V470JV
R7332 0
AB_DUC5
AB_DUB5
AB_DUA5
AB_DUC4
AB_DUB4
AB_DUA4
ZA7301 K4CD01000013
ZA7302 K4CD01000013
ZA7303 K4CD01000013
ZA7304 K4CD01000013
ZA7305 K4CD01000013
①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩

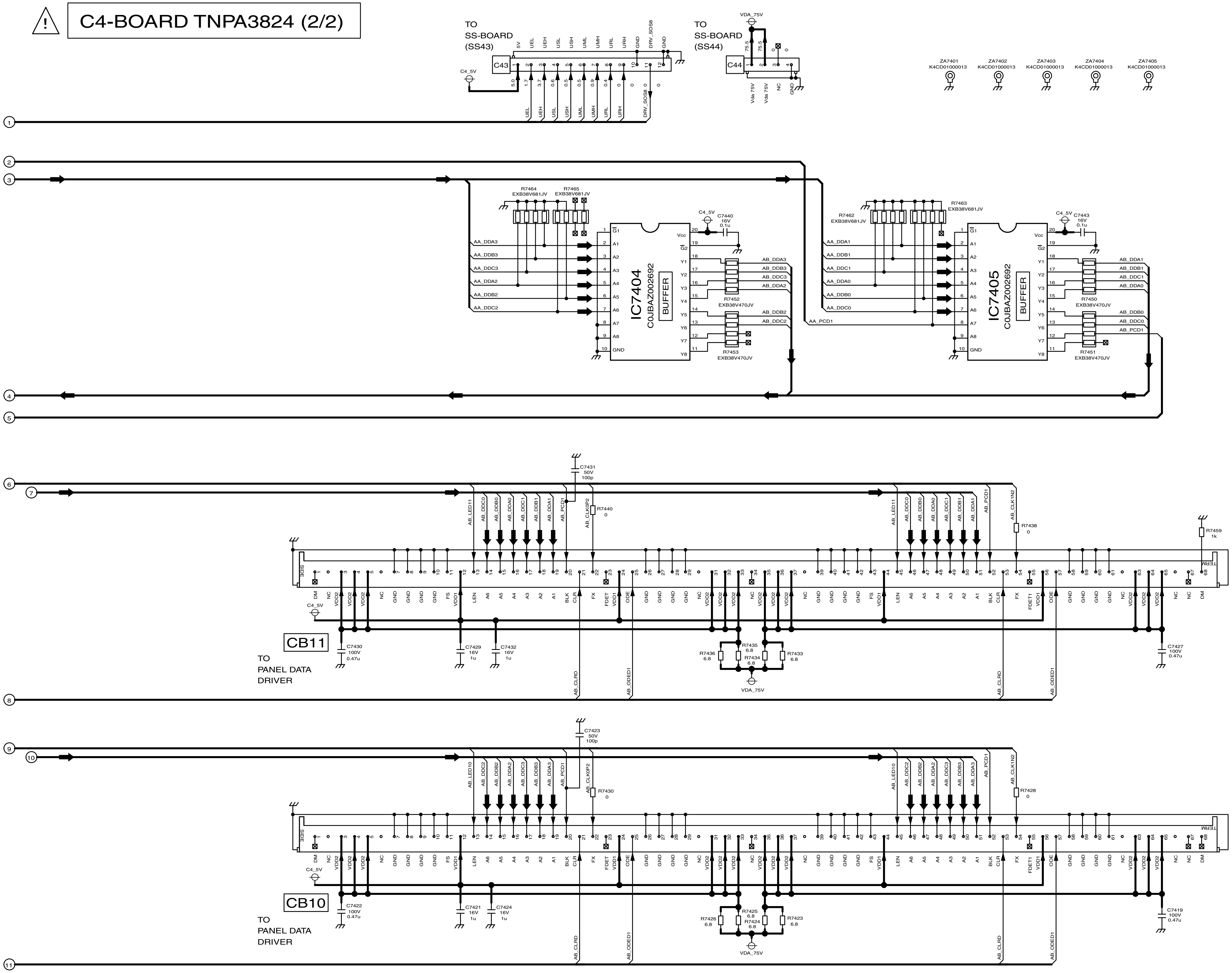
⚠ C4-BOARD TNPA3824 (1/2)


TO
D-BOARD
(D33)
C41
IC7401
IC7402
IC7403
C0JBAZ002692
BUFFER
TO
C5-BOARD
(C52)
C42
CB9
CB8
TO
PANEL DATA
DRIVER
VDA_75V
C4_5V

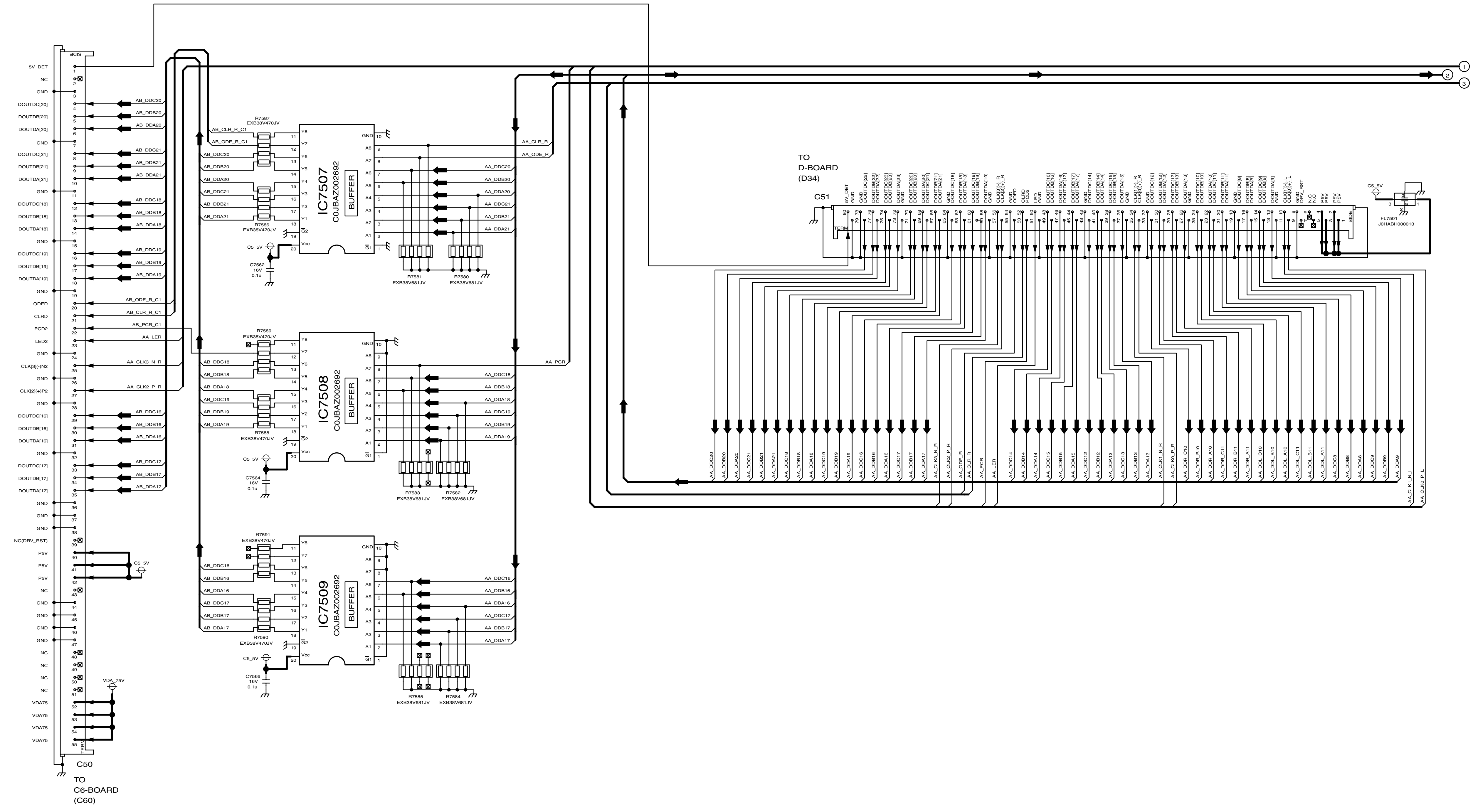
TH-50PV60A
C4-Board (1 of 2) Schematic Diagram

TH-50PV60A
C4-Board (1 of 2) Schematic Diagram

⚠ C4-BOARD TNPA3824 (2/2)

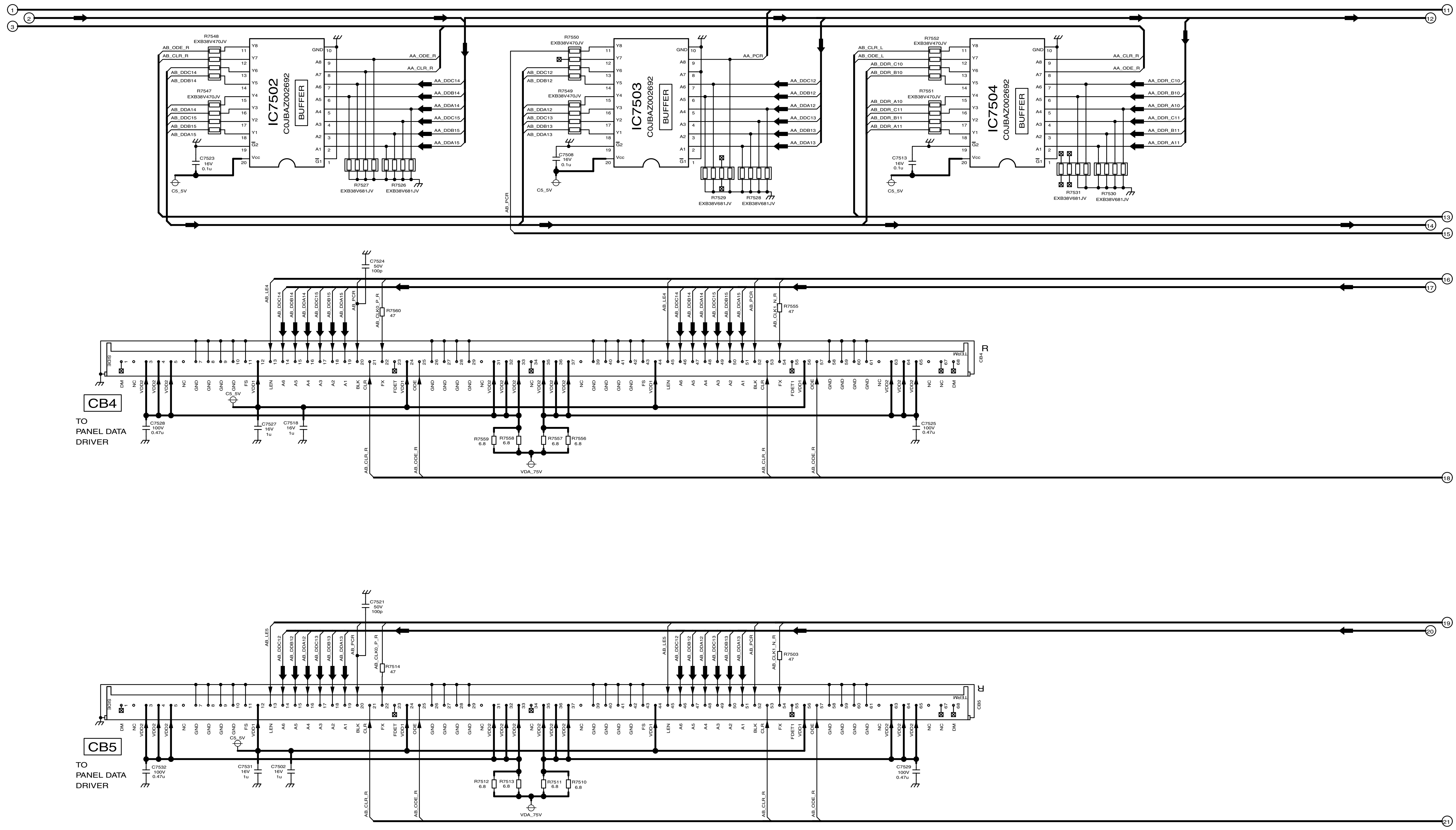

TO SS-BOARD (SS43)
C43
TO SS-BOARD (SS44)
C44
VDA_75V
C4_5V
ZA7401 K4CD01000013
ZA7402 K4CD01000013
ZA7403 K4CD01000013
ZA7404 K4CD01000013
ZA7405 K4CD01000013
R7464 EXB38V681JV
R7465 EXB38V681JV
R7462 EXB38V681JV
R7463 EXB38V681JV
C7440 16V 0.1u
C7443 16V 0.1u
IC7404 C0JBAZ002692 BUFFER
IC7405 C0JBAZ002692 BUFFER
R7452 EXB38V470JV
R7453 EXB38V470JV
R7450 EXB38V470JV
R7451 EXB38V470JV
C7431 50V 100p
C7423 50V 100p
R7440 0
R7438 0
R7459 1k
R7430 0
R7428 0
CB11
TO PANEL DATA DRIVER
C7430 100V 0.47u
C7429 16V 1u
C7432 16V 1u
R7436 6.8
R7435 6.8
R7434 6.8
R7433 6.8
C7427 100V 0.47u
CB10
TO PANEL DATA DRIVER
C7422 100V 0.47u
C7421 16V 1u
C7424 16V 1u
R7426 6.8
R7425 6.8
R7424 6.8
R7423 6.8
C7419 100V 0.47u
AB_CLRD
AB_ODED1
1
2
3
4
5
6
7
8
9
10
11

C5-BOARD TNPA3825 (1/3)



C50
TO
C6-BOARD
(C60)
TO
D-BOARD
(D34)
C51
IC7507
C0JBAZ002692
BUFFER
IC7508
C0JBAZ002692
BUFFER
IC7509
C0JBAZ002692
BUFFER
R7587
EXB38V470JV
R7586
EXB38V470JV
R7589
EXB38V470JV
R7588
EXB38V470JV
R7591
EXB38V470JV
R7590
EXB38V470JV
R7581
EXB38V681JV
R7580
EXB38V681JV
R7583
EXB38V681JV
R7582
EXB38V681JV
R7585
EXB38V681JV
R7584
EXB38V681JV
C7562
16V
0.1u
C7564
16V
0.1u
C7566
16V
0.1u
C5_5V
VDA_75V
FL7501
J0HABH000013
5V_DET
AB_DDC20
AB_DDB20
AB_DDA20
AB_ODE_R_C1
AB_CLR_R_C1
AB_PCR_C1
AA_LER
AA_CLK3_N_R
AA_CLK2_P_R
AA_CLR_R
AA_ODE_R
AA_PCR
AA_CLK1_N_L
AA_CLK0_P_L

⚠ C5-BOARD TNPA3825 (2/3)



IC7502
C0JBAZ002692
BUFFER
IC7503
C0JBAZ002692
BUFFER
IC7504
C0JBAZ002692
BUFFER
R7548 EXB38V470JV
R7547 EXB38V470JV
R7550 EXB38V470JV
R7549 EXB38V470JV
R7552 EXB38V470JV
R7551 EXB38V470JV
R7527 EXB38V681JV
R7526 EXB38V681JV
R7529 EXB38V681JV
R7528 EXB38V681JV
R7531 EXB38V681JV
R7530 EXB38V681JV
C7523 16V 0.1u
C7508 16V 0.1u
C7513 16V 0.1u
C5_5V
AB_ODE_R
AB_CLR_R
AB_DDC14
AB_DDB14
AB_DDA14
AB_DDC15
AB_DDB15
AB_DDA15
AA_ODE_R
AA_CLR_R
AA_DDC14
AA_DDB14
AA_DDA14
AA_DDC15
AA_DDB15
AA_DDA15
AB_DDC12
AB_DDB12
AB_DDA12
AB_DDC13
AB_DDB13
AB_DDA13
AA_PCR
AB_PCR
AA_DDC12
AA_DDB12
AA_DDA12
AA_DDC13
AA_DDB13
AA_DDA13
AB_CLR_L
AB_ODE_L
AB_DDR_C10
AB_DDR_B10
AB_DDR_A10
AB_DDR_C11
AB_DDR_B11
AB_DDR_A11
AA_CLR_R
AA_ODE_R
AA_DDR_C10
AA_DDR_B10
AA_DDR_A10
AA_DDR_C11
AA_DDR_B11
AA_DDR_A11
C7524 50V 100p
AB_LE4
AB_CLK0_P_R
R7560 47
AB_CLK1_N_R
R7555 47
CB4
TO PANEL DATA DRIVER
C7528 100V 0.47u
C7527 16V 1u
C7518 16V 1u
R7559 6.8
R7558 6.8
R7557 6.8
R7556 6.8
VDA_75V
C7525 100V 0.47u
AB_CLR_R
AB_ODE_R
C7521 50V 100p
AB_LE5
R7514 47
R7503 47
CB5
TO PANEL DATA DRIVER
C7532 100V 0.47u
C7531 16V 1u
C7502 16V 1u
R7512 6.8
R7513 6.8
R7511 6.8
R7510 6.8
C7529 100V 0.47u
DM NC VDD2 VDD2 NC GND GND GND FS VDD1 LEN A6 A5 A4 A3 A2 A1 BLK CLR FX FDET VDD1 ODE GND GND GND GND NC VDD2 VDD2 NC VDD2 VDD2 NC GND GND GND GND FS VDD1 LEN A6 A5 A4 A3 A2 A1 BLK CLR FX FDET1 VDD1 ODE GND GND GND GND NC VDD2 VDD2 VDD2 NC NC DM
SIDE
TERM
①
②
③
⑪
⑫
⑬
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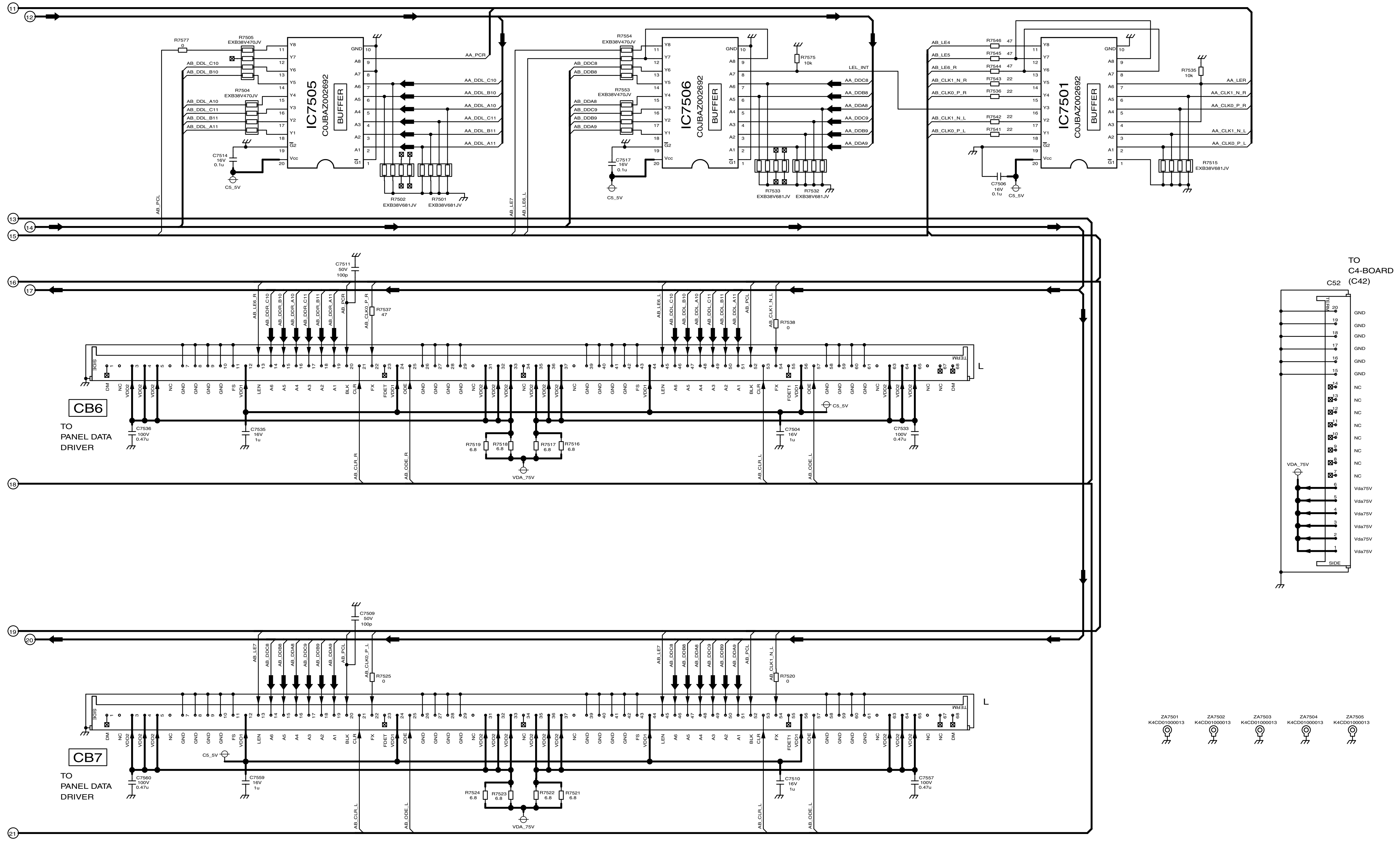
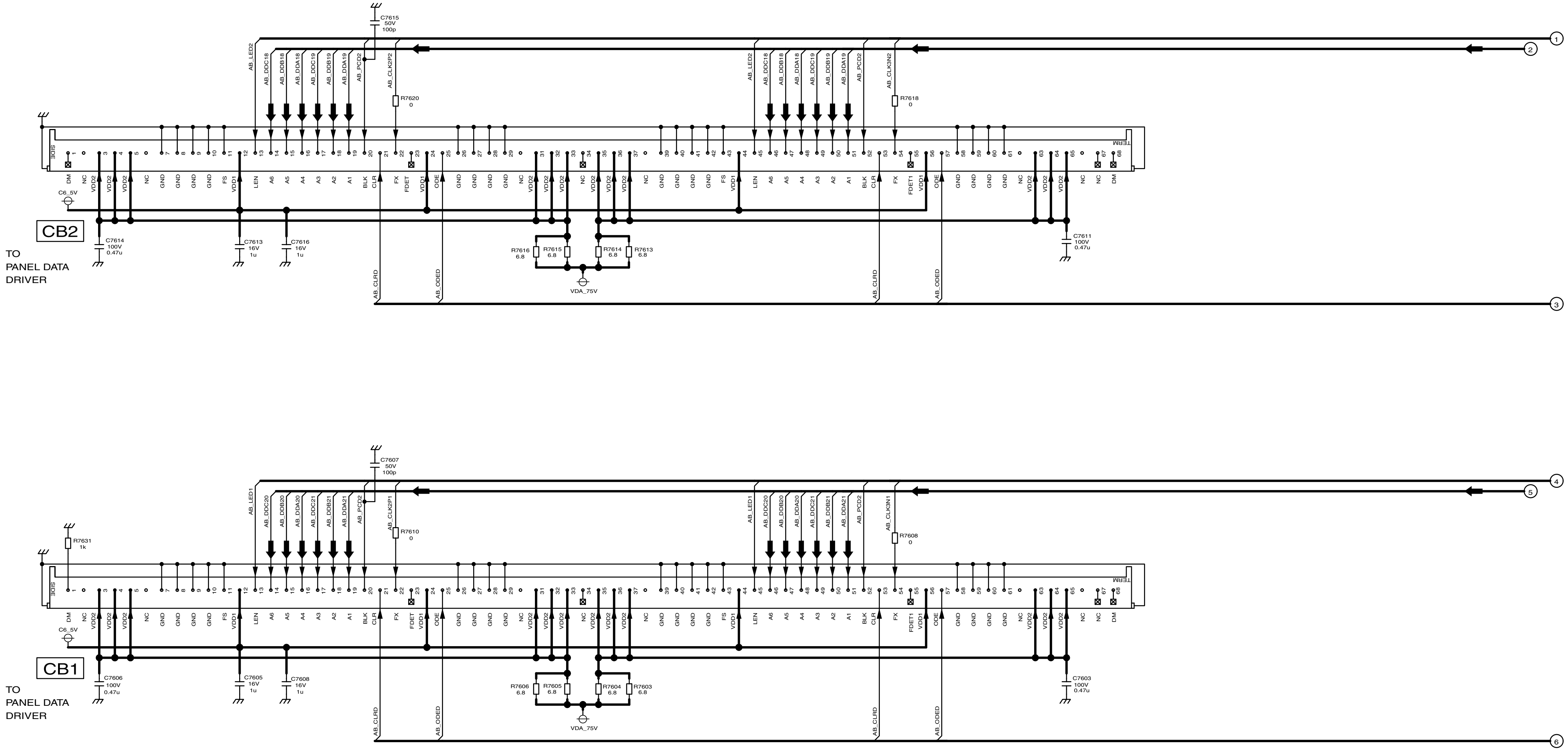
⑲
⑳
㉑

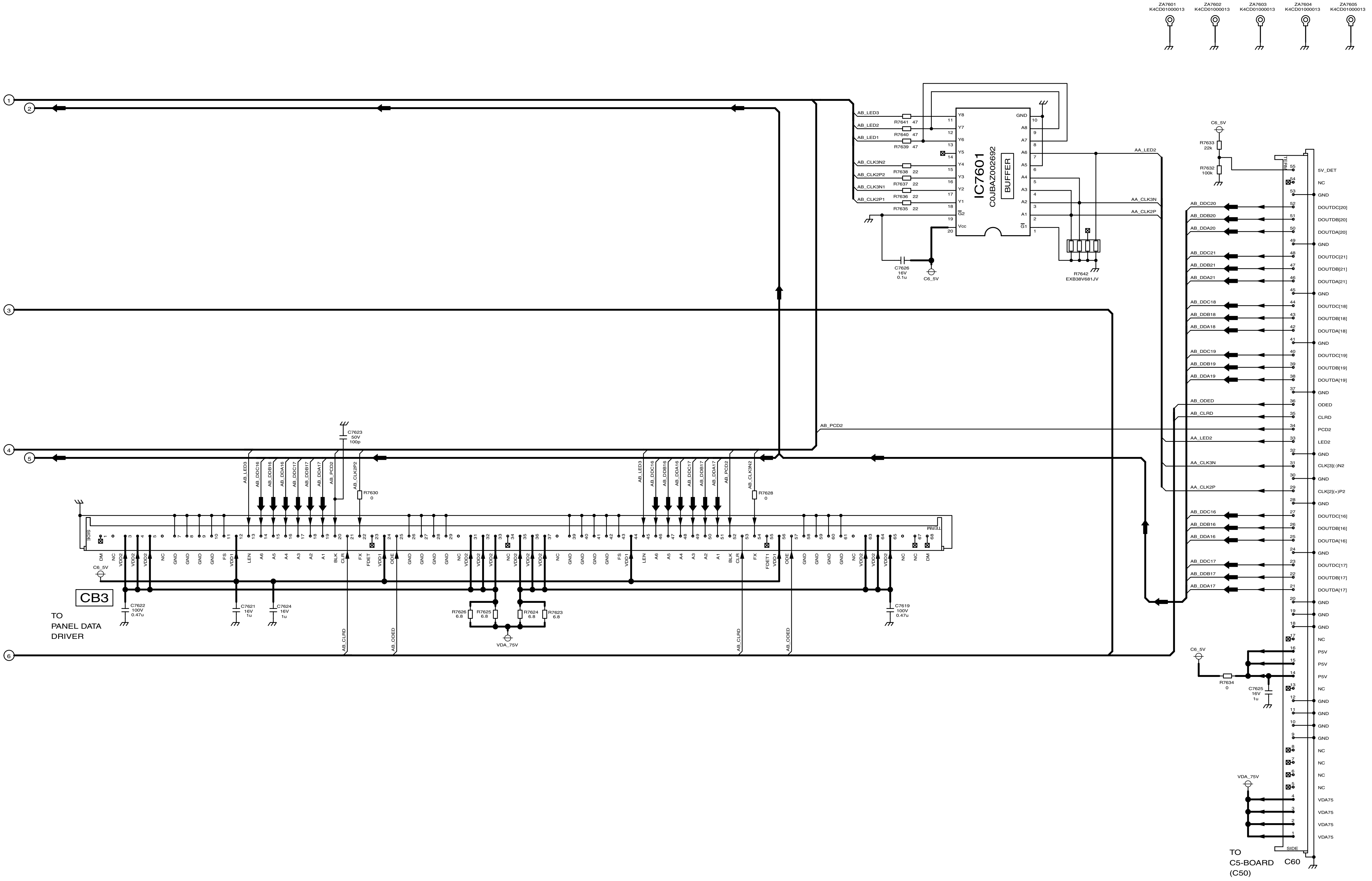
⚠ C5-BOARD TNPA3825 (3/3)


IC7505
C0JBAZ002692
BUFFER
IC7506
C0JBAZ002692
BUFFER
IC7501
C0JBAZ002692
BUFFER
R7577
R7505 EXB38V470JV
R7504 EXB38V470JV
R7554 EXB38V470JV
R7553 EXB38V470JV
R7502 EXB38V681JV
R7501 EXB38V681JV
R7533 EXB38V681JV
R7532 EXB38V681JV
R7515 EXB38V681JV
R7575 10k
R7535 10k
R7546 47
R7545 47
R7544 47
R7543 22
R7536 22
R7542 22
R7541 22
C7514 16V 0.1u
C7517 16V 0.1u
C7506 16V 0.1u
C5_5V
AA_PCR
AA_DDL_C10
AA_DDL_B10
AA_DDL_A10
AA_DDL_C11
AA_DDL_B11
AA_DDL_A11
AB_DDL_C10
AB_DDL_B10
AB_DDL_A10
AB_DDL_C11
AB_DDL_B11
AB_DDL_A11
LEL_INT
AA_DDC8
AA_DDB8
AA_DDA8
AA_DDC9
AA_DDB9
AA_DDA9
AB_DDC8
AB_DDB8
AB_DDA8
AB_DDC9
AB_DDB9
AB_DDA9
AB_LE4
AB_LE5
AB_LE6_R
AB_CLK1_N_R
AB_CLK0_P_R
AB_CLK1_N_L
AB_CLK0_P_L
AA_LER
AA_CLK1_N_R
AA_CLK0_P_R
AA_CLK1_N_L
AA_CLK0_P_L
AB_PCL
AB_LE7
AB_LE6_L
C7511 50V 100p
C7509 50V 100p
R7537 47
R7538 0
R7525 0
R7520 0
CB6
TO PANEL DATA DRIVER
CB7
TO PANEL DATA DRIVER
C7536 100V 0.47u
C7535 16V 1u
C7504 16V 1u
C7533 100V 0.47u
C7560 100V 0.47u
C7559 16V 1u
C7510 16V 1u
C7557 100V 0.47u
R7519 6.8
R7518 6.8
R7517 6.8
R7516 6.8
R7524 6.8
R7523 6.8
R7522 6.8
R7521 6.8
VDA_75V
AB_CLR_R
AB_ODE_R
AB_CLR_L
AB_ODE_L
TO C4-BOARD (C42)
C52
GND
NC
Vda75V
SIDE
TERM
ZA7501 K4CD01000013
ZA7502 K4CD01000013
ZA7503 K4CD01000013
ZA7504 K4CD01000013
ZA7505 K4CD01000013
11
12
13
14
15
16
17
18
19
20
21

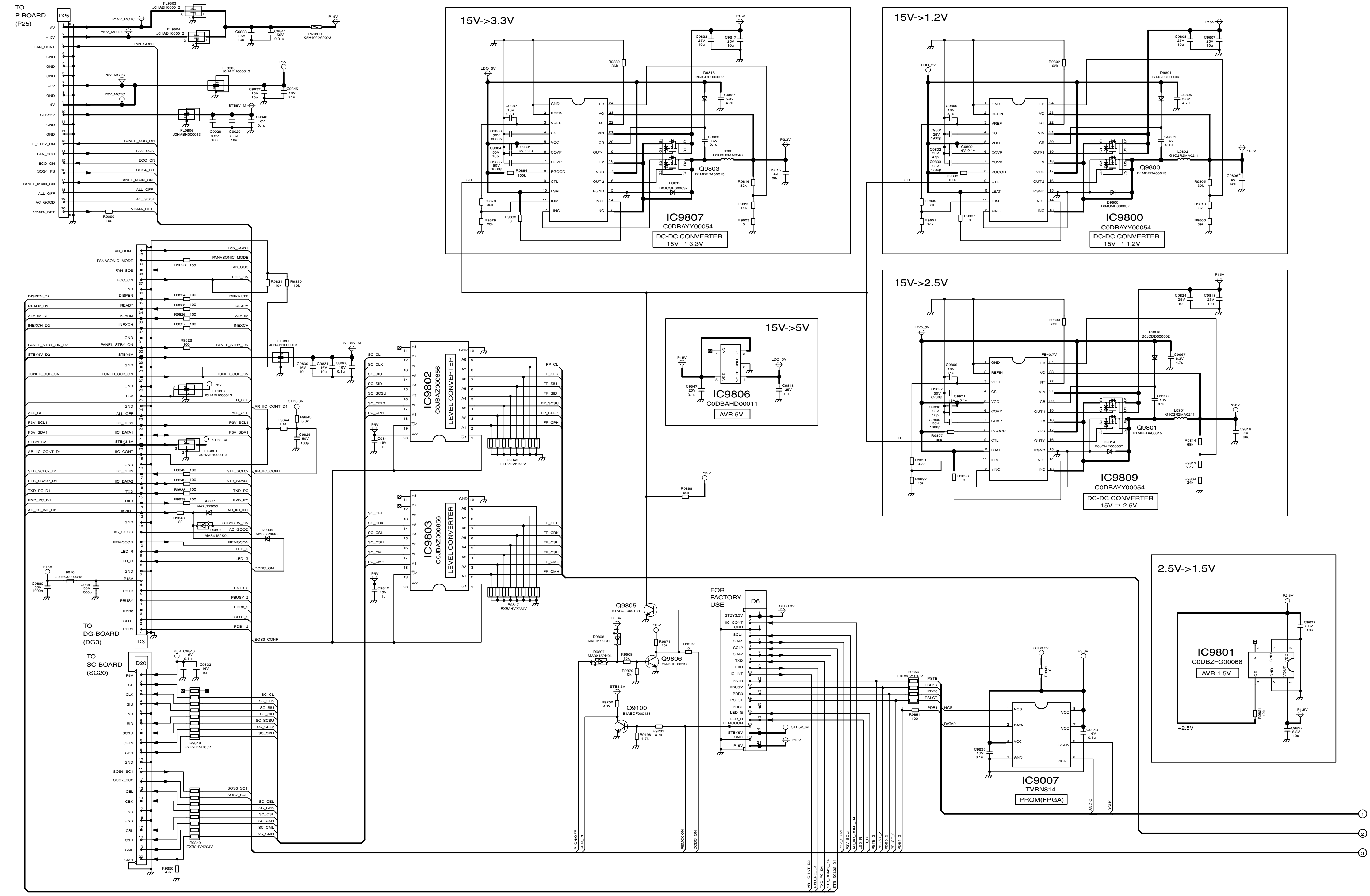
⚠ C6-BOARD TNPA3826 (1/2)


C7615
50V
100p
AB_LED2
AB_DDC18
AB_DDB18
AB_DDA18
AB_DDC19
AB_DDB19
AB_DDA19
AB_PCD2
AB_CLK2P2
R7620
0
AB_CLK3N2
R7618
0
①
②
C6_5V
CB2
TO
PANEL DATA
DRIVER
C7614
100V
0.47u
C7613
16V
1u
C7616
16V
1u
R7616
6.8
R7615
6.8
R7614
6.8
R7613
6.8
VDA_75V
C7611
100V
0.47u
AB_CLRD
AB_ODED
③
TERM
C7607
50V
100p
AB_LED1
AB_DDC20
AB_DDB20
AB_DDA20
AB_DDC21
AB_DDB21
AB_DDA21
AB_CLK2P1
R7610
0
AB_CLK3N1
R7608
0
R7631
1k
④
⑤
CB1
C7606
100V
0.47u
C7605
16V
1u
C7608
16V
1u
R7606
6.8
R7605
6.8
R7604
6.8
R7603
6.8
C7603
100V
0.47u
⑥

C6-BOARD TNPA3826 (2/2)


ZA7601 K4CD01000013
ZA7602 K4CD01000013
ZA7603 K4CD01000013
ZA7604 K4CD01000013
ZA7605 K4CD01000013
IC7601
C0JBAZ002692
BUFFER
AB_LED3
AB_LED2
AB_LED1
AB_CLK3N2
AB_CLK2P2
AB_CLK3N1
AB_CLK2P1
R7641 47
R7640 47
R7639 47
R7638 22
R7637 22
R7636 22
R7635 22
C7626 16V 0.1u
C6_5V
R7642 EXB38V681JV
AA_LED2
AA_CLK3N
AA_CLK2P
R7633 22k
R7632 100k
AB_PCD2
C7623 50V 100p
R7630 0
R7628 0
CB3
TO PANEL DATA DRIVER
C7622 100V 0.47u
C7621 16V 1u
C7624 16V 1u
R7626 6.8
R7625 6.8
R7624 6.8
R7623 6.8
VDA_75V
C7619 100V 0.47u
AB_CLRD
AB_ODED
R7634 0
C7625 16V 1u
5V_DET
DOUTDC[20]
DOUTDB[20]
DOUTDA[20]
ODED
CLRD
PCD2
LED2
CLK[3](-)N2
CLK[2](+)P2
P5V
VDA75
TO C5-BOARD (C50)
C60
TERM
SIDE

D-BOARD TZTNP01BETB (1/8)

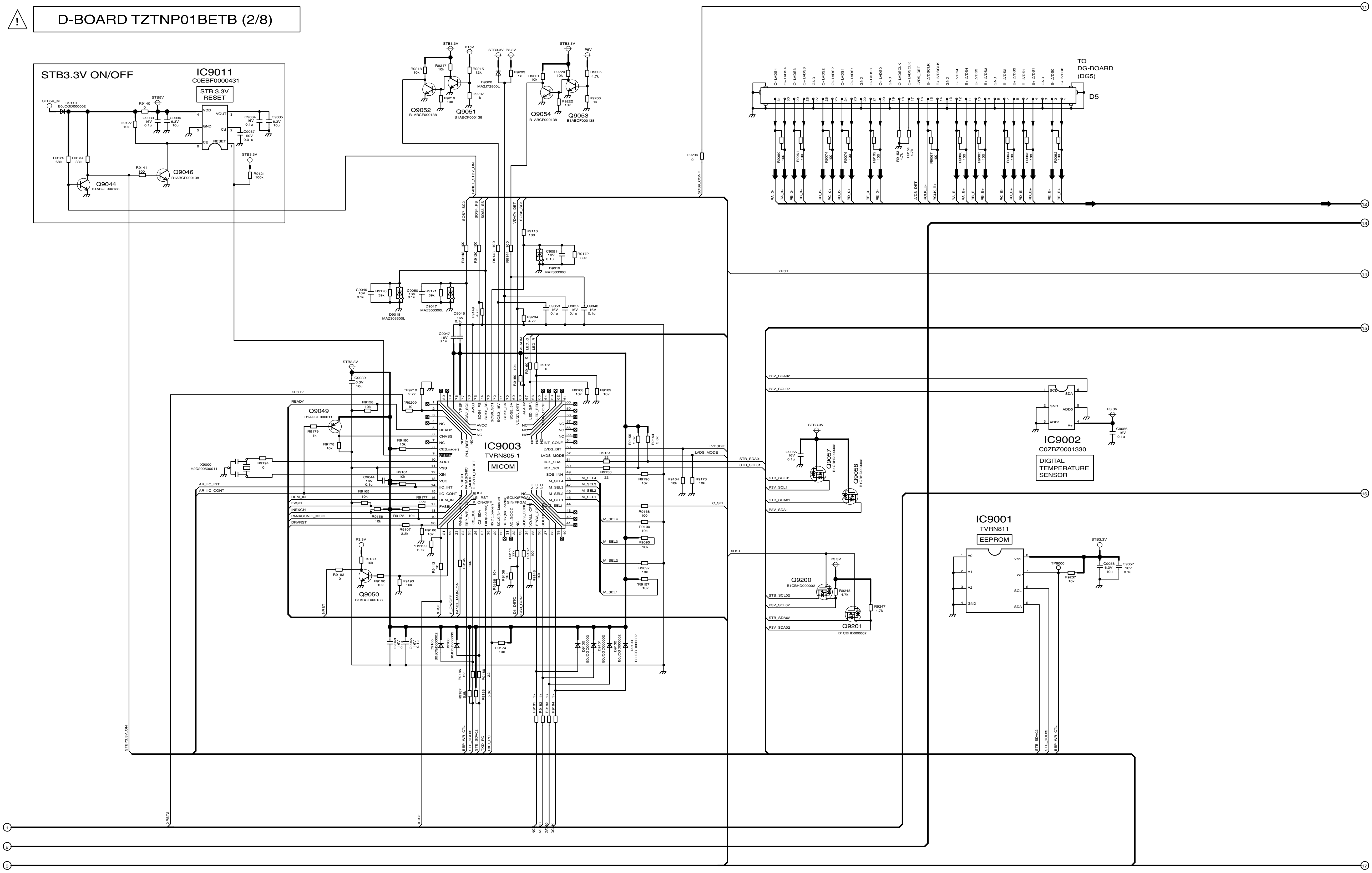

TO P-BOARD (P25)
D25
FL9803 J0HABH000012
FL9804 J0HABH000012
FL9805 J0HABH000013
FL9806 J0HABH000013
PA9800 K5H4022A0023
P15V_MOTO
P5V_MOTO
STB5V_M
+15V
FAN_CONT
GND
+5V
STBY5V
F_STBY_ON
FAN_SOS
ECO_ON
SOS4_PS
PANEL_MAIN_ON
ALL_OFF
AC_GOOD
VDATA_DET
TUNER_SUB_ON
R9099 100
15V->3.3V
IC9807
C0DBAYY00054
DC-DC CONVERTER 15V → 3.3V
Q9803 B1MBEDA00015
L9800 G1C3R0MA0248
D9812 B0JCME000037
D9813 B0JCDD000002
P3.3V
LDO_5V
15V->1.2V
IC9800
C0DBAYY00054
DC-DC CONVERTER 15V → 1.2V
Q9800 B1MBEDA00015
L9802 G1C2R2MA0241
P1.2V
15V->2.5V
IC9809
C0DBAYY00054
DC-DC CONVERTER 15V → 2.5V
Q9801 B1MBEDA00015
L9801 G1C2R2MA0241
D9814 B0JCME000037
D9815 B0JCDD000002
P2.5V
15V->5V
IC9806
C0DBAHD00011
AVR 5V
2.5V->1.5V
IC9801
C0DBZFG00066
AVR 1.5V
P1.5V
+2.5V
IC9802
C0JBAZ000856
LEVEL CONVERTER
IC9803
C0JBAZ000856
LEVEL CONVERTER
R9846 EXB2HV272JV
R9847 EXB2HV272JV
FP_CL
FP_CLK
FP_SID
FP_SCSU
FP_CEL2
FP_CPH
FP_CEL
FP_CBK
FP_CSL
FP_CSH
FP_CML
FP_CMH
FL9800 J0HABH000013
FL9807 J0HABH000013
FL9801 J0HABH000013
TO DG-BOARD (DG3)
D3
TO SC-BOARD (SC20)
D20
R9848 EXB2HV470JV
R9849 EXB2HV470JV
L9810 J0JHC0000045
D9802 MA2J72800L
D9804 MA3X152K0L
D9035 MA2J72800L
DCDC_ON
SOS9_CONF
Q9805 B1ABCF000138
Q9806 B1ABCF000138
Q9100 B1ABCF000138
D9808 MA3X152K0L
D9807 MA3X152K0L
FOR FACTORY USE
D6
STB3.3V
IIC_CONT
SCL1
SDA1
SCL2
SDA2
TXD
RXD
IIC_INT
PSTB
PBUSY
PDB0
PSLCT
PDB1
LED_G
LED_R
REMOCON
STB5V_M
P15V
R9859 EXB38V101JV
R9854 100
NCS
DATA0
IC9007
TVRN814
PROM(FPGA)
VCC
DCLK
ASDI
GND
ASDIO
1
2
3
A
B
C
D
E
F

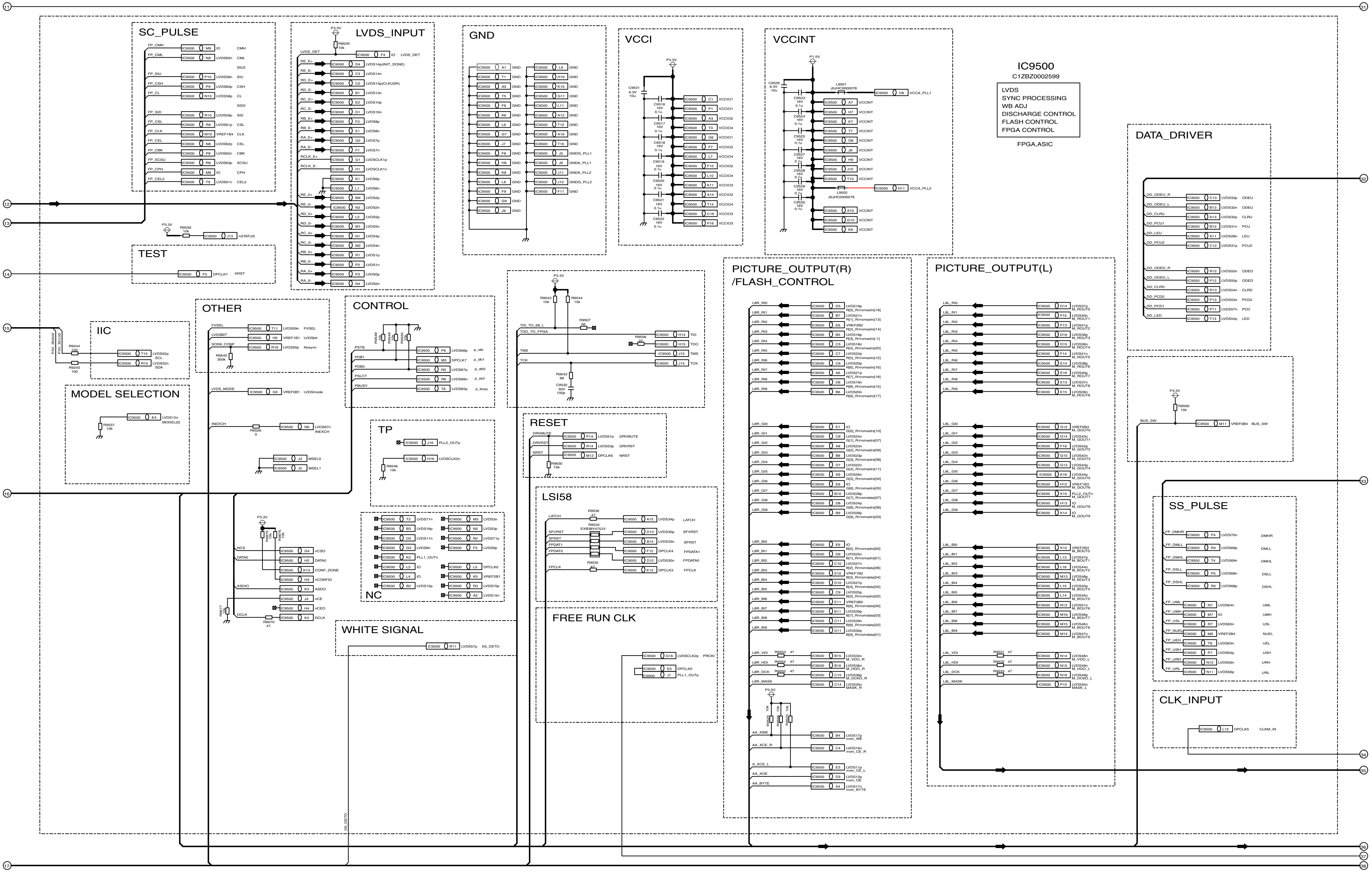
1
2
3
4
5
6
7
8
9

TH-50PV60A
D-Board (1 of 8) Schematic Diagram

TH-50PV60A
D-Board (1 of 8) Schematic Diagram

D-BOARD TZTNP01BETB (2/8)


STB3.3V ON/OFF
IC9011
C0EBF0000431
STB 3.3V RESET
Q9044
B1ABCF000138
Q9046
B1ABCF000138
Q9052
Q9051
Q9054
Q9053
B1ABCF000138
D9020
MA2J72800L
D9019
MAZ303300L
D9018
MAZ303300L
D9017
MAZ303300L
TO DG-BOARD (DG5)
D5
IC9003
TVRN805-1
MICOM
Q9049
B1ADCE000011
Q9050
B1ABCF000138
X9000
H2D200500011
IC9002
C0ZBZ0001330
DIGITAL TEMPERATURE SENSOR
Q9057
Q9058
B1CBHD000002
Q9200
Q9201
B1CBHD000002
IC9001
TVRN811
EEPROM
XRST
XRST2
STBY3.3V_ON
P3V_SDA02
P3V_SCL02
STB_SDA01
STB_SCL01
LVDSBIT
LVDS_MODE
C_SEL
AR_IIC_INT
AR_IIC_CONT
REM_IN
FVSEL
INEXCH
PANASONIC_MODE
DRVRST
READY
M_SEL1
M_SEL2
M_SEL3
M_SEL4
EEP_WR_CTL
STB_SCL02
STB_SDA02
TXD_PC
RXD_PC
SOS9_CONF
STB3.3V
P3.3V
P5V
P15V
STB5V
STB5V_M
①
②
③
⑪
⑫
⑬
⑭
⑮
⑯
⑰


SC_PULSE
LVDS_INPUT
GND
VCCI
VCCINT
IC9500
C1ZBZ0002599
LVDS
SYNC PROCESSING
WB ADJ
DISCHARGE CONTROL
FLASH CONTROL
FPGA CONTROL
FPGA,ASIC
DATA_DRIVER
TEST
OTHER
CONTROL
IIC
MODEL SELECTION
TP
NC
RESET
LSI58
FREE RUN CLK
WHITE SIGNAL
PICTURE_OUTPUT(R)
/FLASH_CONTROL
PICTURE_OUTPUT(L)
SS_PULSE
CLK_INPUT
P3.3V
P1.5V

D-BOARD TZTNP01BETB (3/8)

TH-50PV60A
D-Board (3 of 8) Schematic Diagram

TH-50PV60A
D-Board (3 of 8) Schematic Diagram